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EDITED BY

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seemed to raise a presumption against rather than in favor of the opinion that inflammation of the cervix and ulceration of the orifice of the uterus are conditions of great pathological importance! In this he displays a degree of philosophical humility above all praise, for had he succeeded in proving, as undoubtedly he believed, that the neck is nothing and that it is very frequently beset with nothings, in the shape of superficial ulcerations, I submit that his work was accomplished and his warfare ended. What need of two more lectures to exult over a fallen foe? Its life ought at least to have been spared to grace the triumphal procession of his subsequent lectures.

Considering that the complex character of disease offers one great impediment to our thoroughly understanding it, Dr. WEST was induced to propose that we should, if possible, study:—

"As the *third point* in this enquiry, ulceration of the os uteri, under some condition in which it presents itself to our notice unconnected with other disease, and with such circumstances as to admit readily of our observing its characters, and noting its course and consequences."

Dr. WEST finds all these conditions for the study of ulceration, its symptoms and effects, its progress and consequences, uncomplicated by any other disease whatever, in cases of prolapsion of the uterus beyond the external parts, where moreover it can be easily inspected. Is prolapsus, then, not a disease? Supposing such a displacement to be not accompanied by inflammation or engorgement (which, however, is rare), is the lesion of situation nothing? It and its kindred affections, retroversion, anteversion, inversion, &c., have usually been regarded as such deviations from the normal state as to have found a place in Treatises on the Diseases of Females. So far from presenting a state of case in which ulceration of the os uteri can be abstractly studied, it does certainly seem to me that procidentia uteri greatly complicates the problem and makes it very difficult to determine what is to be attributed to the unnatural position of the organ and what to ulceration of its orifice.

In cases of complete prolapsion, the inverted vagina furnishes an investment to the misplaced organ, and its lining membrane gradually assumes the characters of ordinary integument, while the lips of the os uteri retain their original delicate structure and

are, according to Dr. WEST, permanently in a state of abrasion or superficial ulceration. The inverted vagina is also implicated, and the ulcers upon it are apt to become deep and excavated, with raised and callous edges, exactly resembling chronic ulcers of the skin of other parts of the body.

And now for the study of these abrasions, which the, as he would persuade us, immaterial accident of procidentia has luckily thrown in our way, and we must take Dr. WEST for our guide, as such cases are by no means so common with us as he reports them to be in England:—

"The abrasions of the os, however, after weeks or months still retain much the same characters as they originally presented. They extend, indeed, at one time over a larger extent of surface than they occupy at another; but they very rarely increase in depth, or exten i into the subjacent tissue. The ulcerated surface is denuded of epithelium; now and then it is partially covered by a thin layer of yellowish lymph, but usually it is of a rather vivid red color, and of a granular appearance. This granular character is generally more marked in proportion to the age of the ulceration; while in a few instances the granulations are distinct from each other, rather elongated in form, and look exactly like hypertrophied papillæ. A transparent albuminous secretion in general covers the ulcerated surface, and is sometimes poured out freely from it; but there is seldom any abundant discharge from the interior of the uterus, or even from the canal of the cervix."

Nor does the existence of prolapsus, complicated with such ulceration as he describes, incapacitate the uterus for the performance of all its functions, even the highest, provided it be retained in the cavity of the pelvis by some mechanical contrivance. Conception may readily take place and pregnancy and parturition be gone through with as formerly, with little or no additional suffering.

Of all the shifts and subterfuges resorted to by Dr. WEST to maintain his position, this, afforded by the procident uterus, appears to me the least tenable. It is manifest to the most superficial thinker that the abrasions of the os uteri and the deep ulcers of the vagina may be nothing more than the consequences of friction and the irritation necessarily caused by the dribbling of urine over the mucous surfaces. Abrasions and ulcers, produced by such purely mechanical causes, although perpetuated for an indefinite length of time, are never more than trivial local affections,

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and instead of increasing may be expected to diminish, as the parts become accustomed to such exposure. They are not, pathologically speaking, genuine phlegmasia and are incapable of giving rise to grave symptoms or of involving the deeper-seated tissues in the results of veritable inflammatory action. They may be good exemplars of Dr. WEST's idea of cervical inflammation and its sequences, but every practical observer must recognize a wide difference.

But allowing, for the nonce, that these urinous abrasions and exulcerations are models of the disease in controversy, we must not, in trying to estimate their value, lose sight of the comparative insensibility and diminished influence of the uterus, consequent on its exoteric position. While it is *in situ*, inflammation of the neck or incipient prolapsus may affect the bladder and rectum, teasing them by traction or involving them in inflammation or a high degree of irritation. Hence, dysuria and tenesmus are among the most common symptoms of cervical inflammation. It is easy to conceive what an amount of morbid influence may thus be radiated from the pelvic viscera, deranging the functions of other organs in sympathy with them. But let the uterus achieve its fall, drawing the vagina along with itself and converting it into a hernial sac, with an almost cutaneous envelope, into which the ovaria and tubes, the bladder and part of the rectum and some convolutions of the small intestine are received,—it and they soon become accomodated to their novel situation, all strain is taken off from its supports that had been hitherto kept tense by their resistance, and a notable mitigation of the most distressing symptoms ensues. Dr. BLUNDELL does but repeat what must be familiar to all, when he says: "In procidentia of the uterus, it is remarkable that the health of the patient often suffers very little. Indeed it has been often observed, with truth, that the general health is often much worse in those cases in which there is a mere relaxation, than in those cases of procidentia which we have just been considering; in which the vagina and uterus lie forth under view."*

From this consideration, it is manifest that even supposing the

* Principles and Practice of Obstetric Medicine, London, p. 700.

abrasions of the procident uterus to be of the same nature as those of the organ *in situ*, they are comparatively innocuous, and that, therefore, any conclusions drawn from one are not logically applicable to the other, unless it can be shown that like effects are to be expected from like causes under dissimilar conditions.

We have at length arrived at the fourth and most important part of this inquiry, which is to ascertain "what clinical observation generally teaches us concerning ulceration of the os uteri, its course, its symptoms, and its importance." In approaching this question, as Dr. West declares we are bound to do with no conscious bias of the mind in one or the other direction, three different probabilities suggest themselves to us, of which any one may be correct.

"1st. Ulceration of the os uteri may be the cause of all the symptoms of uterine disease which have been attributed to it; and consequently it may be of no less importance to remove it when present, than to ascertain the fact of its existence.

"2nd. Though not in itself the cause of the symptoms, or at least of the greater part of them, it may yet be the concomitant of certain forms of uterine disease; of the state and progress of which its extent and degree may be a trustworthy index. In this case, though of small importance as far as therapeutical proceedings are concerned, it may yet be of great semiological value.

"3rd. Neither the one or the other of these suppositions may be correct; but either the ulceration may exist alone, giving rise in that case to few symptoms, or to none at all; or it may, in other instances, complicate different uterine ailments, though not an index of their state, nor varying with their changes."

Considering that, in the opinion of some writers, so large a proportion as eighty-one per cent. of all women presenting symptoms of uterine ailment, are suffering from inflammatory disease of the tissue or canal of the cervix, and 70·4 per cent. likewise from ulceration of the os uteri, Dr. West thinks the inquiry may be very briefly disposed of,—for the evidence in support of such a view must, he alleges, be overwhelming, the symptoms of ulceration of the os uteri must be characteristic, either from their peculiarity or severity, or from both together, and must differ, in important respects, from such as attend upon those uterine ailments which are not associated with that condition. Here is a string of propositions, stated in the language of Dr. West himself, upon which his subsequent reasoning turns and from which his eventual con-

clusion is deduced, and yet these propositions or premises are not only not proved but wholly gratuitous and unfounded.

When, in investigating the pathological state of the womb, we discover, by tactile and ocular proof, that there is inflammation of the cervix and are not able to detect any other lesion of the organ or its appendages, why should we refuse to allow this morbid condition of the cervix to be the *causa symptomatorum* unless its vouchers are *overwhelming?* Shall inflammation of the *corpus uteri* or no appreciable lesion of any kind be entitled to rank as a cause of uterine symptoms upon evidence less irresistible? It is easy to discover, in such rigorous exactions of the cervix, the influence of the bias deprecated by Dr. WEST, but which has, nevertheless, so possessed him that it cannot be exorcised.

His second assumption demands that the symptoms of ulceration of the os uteri shall be characteristic and differ materially from those of all other uterine ailments,—a hard requisition and one with which it may not be possible for the symptoms of any uterine disease to comply. There is not a disease of the uterus, whether it be imflammation of the body or neck, polypus, fibrous tumor or even cancer, prolapsus, inversion, anteversion or retroversion, which is always accompanied with characteristic symptoms, such as serve to diagnose it without physical examination. Dr. SIMPSON, the renowned Professor of Midwifery in the University of Edinburgh, in his "Contributions to the Pathology and Treatment of Diseases of the Uterus,"* lays it down as his first proposition that, "*The general and local functional symptoms of disease of the uterus are such as enable us to localize, without enabling us to specialize, the exact affection of the organ.*"

He illustrates and establishes the truth of this proposition, which does but embody the experience of all men and all time, by referring to the dissimilar effects of pregnancy, in different cases, and to the different phenomena of uterine disease, excited by the same specific affection of the organ, while, on the contrary, "the same specific phenomena frequently result from affections of the organ, that are entirely at variance with each other, in their pathological character, in their course, and in their treatment."

* London and Edinburgh Monthly Journal.

To instance some of these diseases. Scirrhous degeneration of the cervix uteri sometimes gives rise, at an early period of its progress, to severe pains in the uterine region and marked constitutional derangement. In other cases, which have come under my own observation, it pursues its course without pain and with such slight disorder of the uterine functions, including, as Dr. WEST would say, the highest, as to escape the notice of patient and physician, until its destructive ravages are well nigh completed. "While," as Prof. SIMPSON remarks, "we thus not unfrequently find the most malignant organic diseases of the uterus more or less latent or masked in their symptoms, we have, on the other hand, sometimes the most severe local and constitutional symptoms of uterine disease developed in instances of slight and remediable organic affections of the part, as in cases of simple ulceration and granular inflammation of the cervix; and these symptoms may be all present in their most aggravated forms for months and even for years, when the local examination and final result show us that there is no organic disease whatever as in cases of "irritable uterus" or hysteralgia. Indeed, in some females, we have all these symptoms strongly but temporarily excited at every recurrence of the catamenial discharge, in connection merely with that congestive and increased vital activity of the organ which accompanies its natural menstrual secretion."

There is a certain group of sufficiently well-defined symptoms, such as *pain in the sacral, pubic or iliac regions*, mostly dull but occasionally acute and paroxysmal, like parturient pains; *heat or burning* in these same regions; *sense of fullness and weight* within the pelvis; *bearing down; hemorrhagic and leucorrheal discharges; deranged menstruation; painful coition; and frequently recurring abortion*,—which point plainly enough to the uterus as the seat of disease of some kind, but none of them nor all of them, in any combination, infallibly indicates the special morbid affection, which may only be revealed by physical exploration.

But although the terms of its admission into the nosological nomenclature are hard and unreasonable, it may safely be affirmed that inflammation and ulceration of the cervix can approximate more nearly to them than any other uterine affection, its symptoms

being better marked, and sometimes, indeed, quite pathognomonic, as will be presently shown.

From these considerations, it undeniably follows that to require inflammation of the cervix to exhibit, as its credentials, peculiar and sharply-defined symptoms, such as are not observed in any other uterine disease, or submit to be expunged from the record of this class of maladies, is an infringement of its rights, against which those charged with protecting them are bound to protest.

We are justified, by every principle of sound reasoning, in maintaining that if other lesions may derange the uterine functions and affect the general health, so may it, and that, if no other lesion can be detected, after the most sedulous examination, to ignore it or estimate it as nothing is a violation alike of sound philosophy and common sense.

When we are led by suspicious symptoms to investigate the condition of the uterus, it is often found that the neck is in a state of chronic inflammation, and no other disease whatever can be discovered, after the most careful and thorough examination. It stands revealed by the speculum in all the vividness and isolation of an ophthalmia and in connection with it some of the symptoms of the uterine category are developed. Notwithstanding that the symptoms themselves may be insufficient to point out this precise local disease, they do, nevertheless, harmonize with it and are such as may be more rationally attributed to it than to any other cause or to no cause at all. To illustrate this remark and at the same time to impress you with the pathological importance of such an affection, though seemingly small, I will offer an admirable description of one form of the malady by the pen of a writer, who had evidently often seen it and diligently studied it. The special form of the affection is chronic inflammation of the *mucous membrane lining the interior of the neck*, and the writer is M. MELIER, in a memoir entitled "*Considerations Pratiques sur le Traitement des Maladies de la Matrice.** Inflammation thus seated is regarded by M. MELIER as a veritable catarrh of the part, extending in some cases into the body of the uterus, and is of very common occurrence. The influence which it exercises

*Memoires de l' Academie Royale de Medecines, 1833, Tome Deuxieme. p. 330.

over the development of other maladies and its ulterior consequences have not, he thinks, been justly appreciated. It may easily be discovered with the speculum, but eludes an investigation by the touch alone. Thus examined, the orifice is perceived to be more or less red, the mucous membrane extending into its cavity appears tumid; thick, viscid, gluey, white mucus, more or less colored and sometimes sanguinolent, is seen flowing or rather adhering, and obstructs the cervical canal, from which it can scarcely be removed by a mop. The orifice itself may be observed in two different states: it may be extremely contracted or very patulous and infundibuliform, from the swelling of its borders. The neck is sometimes tumefied, uneven and indurated; in other cases, it preserves its normal consistence and volume. MELIER adds that he knows not how far the malady is limited to the neck, but it is probable that most frequently it extends to the body of the uterus. The patient complains habitually of a dull, deep-seated pain, sometimes of acute suffering, heat and pruritus behind the pubes, which she indicates as the seat of the malady. Changing their ordinary character, these pains may become more violent and resemble those of labor, and after a longer or shorter time, their sudden cessation is announced by a more abundant discharge than is usually present. The menses, more or less painful, are glairy from the admixture of mucus: coition is painful.

Furthermore, the cervical inflammation is represented by M. MELIER as being very chronic, and in its course, in a longer or shorter time, a new pain is complained of in the inguinal or ovarian regions, indicating a tendency to propagation of disease to one or both ovaria. These organs may become involved and then a tumor is discovered in one or both sides, and the pain becomes more acute and persistent. The neck is primarily affected and for a time suffers alone. Subsequently and by the sympathy of continuity, the ovaria participate in its sufferings and take on inflammatory action, which may result in degeneration of their tissues or hypertrophic enlargement. Interrogate the patients, says M. MELIER, and go back to the very beginning: they will tell you that the malady commenced in the hypogastrium, behind the pubes, and extended consecutively to the ilia. This succession—

these two stages—were well-marked in a patient whom I am now attending with my learned friend, Dr. S. C. ROCHE. Attacked with a catarrh of the uterine neck, she complained only of this *for one year*, at the expiration of which, the right iliac region was affected, and then there was notable enlargement of the ovary of that side. M. MELIER affirms that he has observed the same march, the same succession in many other cases, and, he doubts not, that much of ovarian disease might be prevented by the detection and cure of the cervical malady. This form of cervical inflammation might, with more propriety, be denominated *Mélier's Malady* than the whole class to which it belongs can be called *the Miller disease*—an honor, though not so intended, which some have conferred on myself, and my only regret is that I am not worthy of it.

MELIER'S malady is often overlooked. Too many are apt to confine their examination to the exterior of the neck and, if they find no disease in the mucous membrane that covers it, hastily conclude that the cervix is in a healthy state, although its *lining* membrane is deeply inflamed. Dr. WEST, with his contemptuous notions of the neck, and looking only for "trifling abrasions" upon the cervical exterior, has doubtless often failed to detect comparatively occult disease. For my own part, I can truly declare that inflammation of the lining membrane has often come under my notice and I can bear testimony to the accuracy of M. MELIER'S description of it. Whether ovarian inflammation and morbid degeneration are as often produced by it, as he thinks, I cannot undertake to decide. I have several times observed the co-existence of the two affections, but my opportunities for exact observation have not allowed me to determine their order of succession. This, however, I know, in common with all who have any clinical acquaintance with it, that ovarian pain is among the most common symptoms of cervical inflammation, and there can be no good reason to doubt that a cause, capable of disturbing these organs to that degree, may eventually kindle in them inflammatory action. Such a propagation of inflammation, it may be added, is not more strange than orchitis produced by gonorrheal inflammation of the urethra.

Here, then, is a disease as well made out as any other in the

nosological catalogue, which approximates as nearly as possible to the sublime requisition of Dr. West, and we may fairly demand its recognition as a distinct uterine disease, unless it can be shown that some other affection of the organ has been better studied and is better understood. Let Dr. West designate, if he can, that affection.

Having pointed out the defects in his premises, which vitiate his reasoning, we are prepared to follow Dr. West in the comparison which he institutes between the two grand classes into which he is pleased to divide all uterine diseases, namely, those in which there is, and those in which there is not, ulceration of the mouth of the womb. The object of the comparison is stated to be to ascertain "whether sterility is more frequent, whether the rate of fecundity is lower, and whether abortion occurs oftener in one class of cases than in the other? Whether menstrual disorder is more common, more severe, or different in kind; whether leucorrhœa is more abundant, or furnished from a different source; or whether pain is less tolerable when the os uteri is ulcerated, than when that condition is absent? And lastly, whether similar or different causes produce the uterine affections in the two classes of cases; whether the duration of illness is the same; whether the structural alterations of the womb are alike or diverse?" It is not difficult to detect the radical vice that permeates this statement or to prognosticate the vicious conclusion to which it must needs conduct the learned Croonian. If, in the particulars enumerated, there shall be found no marked difference between the two classes of cases, but, on the contrary, that a great resemblance obtains, so that women, laboring under uterine disorders, may have the same symptoms and results, whether ulceration of the os uteri be absent or present, then, in his own language, "it may be inferred with equal certainty that ulceration of the womb can neither be regarded as a general cause of uterine disease, nor as a trustworthy index of its progress; but that it is a pathological condition of secondary moment, and this even though there be still some difficulty in assigning to it in every instance its proper value." Seeing that there is, as has been shown, remarkable identity in the symptoms of diverse diseases of the womb, the conclusion which I would draw from the premises and

which is unquestionably the legitimate one, is, that different causes, and among them inflammation of the cervix, may give rise to identical symptoms and consequences.

Having opened his cause, Dr. WEST proceeds to spread before us the materials from which he hopes to make some approach to a satisfactory answer to the question he had propounded concerning the *role* of ulceration of the os uteri. These materials are derived from 1226 cases at the Middlesex and St. Bartholomew's Hospital. In only 268 of them did the symptoms appear to him to justify the use of the speculum, and in 125 of these the os uteri was found to be the seat of ulceration, while in the remaining 143, it showed no sign of that condition. He very properly declines using any except the cases examined with the speculum, for the solution of the question before us. These furnish him with the grounds on which the different conclusions rest, and before we proceed with him to work out, or rather unwork, these conclusions, it may not be uninteresting to offer a few words of commentary on the data which were at his disposal. It strikes me as strange that out of the total number of 1226 females, with symptoms of uterine ailment, Dr. WEST should have thought it not necessary to a correct diagnosis to employ the speculum in more than 268 cases. Unless their complaints were exceedingly trivial, I am persuaded that useful light might have been thrown upon them, by a resort to that much abused but invaluable instrument. Then again, that he should have found only 125, less than half the number examined specularly, affected with ulceration, is to myself conclusive proof that either he is sadly deficient in practical sagacity, or women in England are different from their sex in this country,—for, without laying claim to any special tact in this particular, I am confident that I have found inflammation in a far greater proportion of cases, where I had reason to expect it.

Again; it may be instructive to compare Dr. WEST's researches with those of Dr. BENNET, who is connected with another public institution in London, and who, in my opinion, is justly entitled to rank among the highest and most reliable authorities on this subject. Dr. BENNET, as every body knows, affirms the greater frequency and importance of inflammation and ulceration of the cervix in comparison with the body of the uterus, and avers that,

during the last few years, he has kept a careful register of all the cases of uterine disease which he has treated at the Western General Dispensary, with which he is connected as physician-accoucheur. This Dispensary is, as he informs us, one of the largest institutions of the kind in London, nearly ten thousand patients being annually treated by its medical officers. His own patients consist of those who present uterine symptoms, and on analyzing their cases, 300 in number, the details of which were all scrupulously recorded, he finds that 243 were suffering from decided inflammatory disease of the cervix or its cavity and that in 222 ulceration was present, which is in the proportion of one in every 1·57 for inflammation, and one in every 1·78 for ulceration. The analysis of the cases, he further states, which he has seen and attended in private practice during the last three years,—amounting to nearly 300,—leads to precisely the same conclusion. Dr. Bennet considers the local inflammation the real cause of the morbid symptoms, notwithstanding the great diversity in the *apparent* nature of the disease. "Some patients," says he, "complained of leucorrhea, some of dysmenorrhea, some of irregular menstruation, some of flooding, some of backache, some of bearing-down and prolapsus, and some merely of debility and anemia. The true nature of the case had to be sifted out—as generally occurs; what was only a *symptom* being considered the disease."

During the last fifteen years, a large number of females have come under my treatment for sexual diseases,—some of them residing in the city but many more from abroad,—and although I have kept no regular record of their cases, I am very sure that in a large majority of them, inflammation with or without ulceration of the cervix uteri was the special malady and the point of departure of most of their ailments. I do not mean to affirm that it always presents itself in an isolated state, for it is sometimes associated with inflammation of the mucous membrane of the body of the organ, whether by gradual extension or simultaneous occurrence, I cannot undertake to decide. I am, also, well aware that inflammation may be confined to the body, or at least, exist in that portion of the uterus in a more decided degree than in the neck.

Thus much premised, we can give to Dr. West the attention he

craves to the various points, already referred to as likely to elucidate the question of the influence of ulceration of the os uteri in the production of uterine disease or in occasioning functional disorder of the generative system.

1. *Parallel between ulcerative and non-ulcerative uterine diseases in their influence upon reproduction.* To learn whether uterine ailments in general or ulceration of the os uteri in particular exert any pernicious influence over the generative function, Dr. WEST collected the statistics of 980 healthy married women of different ages, who were attended in their confinements by pupils of Saint Bartholomew's Hospital, and the like number, married above one year, who applied during the childbearing period of life on account of any ailment of the uterine system,—125 of whom, being examined with the speculum, were found to be unaffected by ulceration and 117 of the number being affected by it. The information thus collected he embodies in tabular form, from which it appears that there were 4·17 children and ·7 abortions to each marriage of healthy women; 2·7 children and ·47 abortions to each woman with uterine symptoms; 3·3 children and 1·3 abortions to each woman with uterine symptoms but without ulceration; and 3·5 children ·89 abortions to each woman having uterine symptoms with ulceration.

This table discloses what we should have expected, namely, that uterine disease is unfavorable to fecundity; it discloses, also, what we should not have expected, viz: that ulcerative disease is not so unfavorable to propagation as anomalous and anonymous complaints of the womb. The difference between the two classes of cases, viz: the ulcerative and the non-ulcerative, is, as Dr. WEST confesses, but small, and the number of cases from which the table is constructed are too few to justify any such inference; "but I do think," he says, "that we are warranted in concluding that ulceration of the os uteri does not interfere with the performance of the most important function of the generative system in any peculiar manner, or to a greater degree than many other uterine ailments." My own conclusion would be that although ulceration of the os uteri is not an insurmountable barrier to fecundity, yet *it diminishes fecundity nearly as much as all other diseases besides*,—the figures being 3·5 to 3·3, while its

proportion of abortions is as ·89 to 1·3, of all that occur in females laboring under uterine complaints. This conclusion rests on the basis, already sought to be established for it, namely, that if no other disease could be detected, it alone is to be held responsible for the pathological results.

The observations of Dr. West, thus tabulated and paraded as of mighty statistical moment, are, however, so deficient in details as to be well nigh valueless. We do not learn anything from him except that these cases were accompanied with *uterine symptoms*, and ulceration was found in a certain number but absent in the remainder; that each class bore a certain number of children and aborted a certain number of times! As to the ulcerative cases, we are not informed how long the local lesion had existed or whether it was discovered only once or oftener by specular examination. For aught that appears to the contrary, the ulceration might have supervened upon the last parturition or abortion and consequently might have had no agency either in promoting or thwarting fecundity.

From researches so sterile in available information it is refreshing to turn to those of Mr. Whitehead, of Manchester, who has, by indefatigable labor in an almost boundless field and amid scenes calculated to repel most men, collected and systematically arranged a body of accurately observed facts, bearing on this question, from which we feel safe in drawing definite and positive conclusions. The results of these laborious investigations he has given us in an unpretending volume, entitled "Causes and Treatment of Sterility and Abortion,"—a monument to his memory more enduring than even "written rocks." His cases occurred among the patients of the Manchester Lying-in Hospital,—an institution peculiar, as he tells us, in having no beds, its very numerous patients being attended at their own houses or hovels, and consisting of the humbler order of females, mostly factory operatives. From thousands of these he collected the history of the reproductive period (*twenty years*) of their lives; thousands of them were, moreover, examined with the speculum, and thus a mass of information was gathered, unequalled on this subject and scarcely surpassed on any other.

Our present inquiry is concerned only with the *causes* of abor

tion, with some allusion merely to its treatment, so far as it confirms the verity of the causes assigned. Mr. WHITEHEAD questioned two thousand women on their admission as patients in the Manchester Lying-in Hospital, as to their previous history in reference especially to their unsuccessful pregnancies, and the causes assigned by them and their medical attendants for the misfortune in each instance. Of this number, seven hundred and forty-seven had already aborted once at least; to some, the event had occurred several times. The sum of their abortions was twelve hundred and twenty-two. The following are the causes to which they had been attributed:—

"Inward weakness," impaired state of the health generally, and acute disease,	911
Accidents, mental perturbations, &c.	221
No assignable cause,	90
	1222

By the term "inward weakness" and its equivalent, "waste," which is usually employed by the uneducated poor in England and also in this country, is always meant *leucorrhea*, *fluor albus*, or *whites*. The form of the affection in which the discharge consists in part of pus, the common people of Manchester denominate the "yellows," expressive of its color, which they rightly regard as a more serious malady. Mr. WHITEHEAD was frequently struck, in the course of his inquiries, with the commonness of leucorrheal discharges previous to abortion, in connection with a well marked train of local and constitutional disturbances, and on resorting to the speculum in such cases, the source of the discharge appeared to be plainly revealed;—"disease of the lower part of the uterus being found to exist in almost every instance." That this lesion of structure constitutes the true pathological seat of leucorrhea and of all its associated phenomena, as well as a very frequent cause of disastrous events during pregnancy, is, he thinks, proved by the beneficial effects of remedies directed to the uterine affection, such as cauterization with the nitrate of silver, &c., as in cases uncomplicated by pregnancy. With the improvement of the local affection, the discharge diminishes, the patient becomes more comfortable, being relieved of most of the symptoms that had dis-

tressed her before previous abortions, and she may go the to full time and give birth to a healthy child.

Mr. WHITEHEAD subjected to careful investigation three hundred and seventy-eight cases of abortion, principally with a view to obtain a correct statistical average of its prevailing causes, and the result is embodied in the subjoined table.

Causes of, and conditions associated with Abortion, in Three Hundred and Seventy-eight Cases.

Accidental agencies.	Placenta prævia.	Constipation of the bowels.	Retroversion of the uterus.	Incurable disease.	Vascular congestion.	Disease of the lower part of the uterus.	Obscure causes.
44	8	3	3	1	15	275	29

Upon these divers causes of abortion he offers judicious practical remarks, illustrated and enforced by a recital of cases; but we are at present interested only with *disease of the lower part of the uterus* (the cervix), considered as a cause of abortion, which figures largely in this table, claiming seventy-three per cent., as its proportion. These were, with very few exceptions, examined with the speculum, either before the abortion took place or in three or four weeks after, and in every case, disease of the lower or of the internal part of the uterus, and in a few instances of the vagina was found to exist. Some who had the disease in a severe form submitted to treatment and were cured; others disappeared after being prescribed for two or three times. One hundred and forty-one of these patients have a second, some a third time presented themselves for treatment, being again pregnant and affected precisely as they were on previous occasions. As to the success of remedial measures directed chiefly to the local affection, in preventing abortion, in such as submitted, a second or third time, to treatment, we are told,—"In fifteen of those who have been a second time treated, the issue has terminated unfavorably. Fifty-four have already arrived at the full period of the process; of whom three were delivered of still-born children, and in fifty-one the child was born alive and in health in each case. In the remainder, the treatment has been so for successful as to lead to a confident hope that the issue will be favorable."

The discovery of ulceration of the cervix uteri in pregnant

females is attributed by Dr. BENNET to M. BOYS DE LOURY, one of the physicians of Saint Lazarre, a hospital prison in Paris, by whom it was recognized as a frequent cause of abortion. This opinion was adopted and confirmed by Dr. BENNET prior to the date of Mr. WHITEHEAD'S publication. To the former, indeed, the profession in Great Britain and this country are indebted for their knowledge of the subject. Dr. BENNET describes, however, but one variety of the affection,—a modification of the simple inflammatory ulceration of the non-gravid state. The hypertrophy, increased vascularity and softening of the womb during pregnancy changes the aspect of this form of ulceration in a very striking manner,—its surface becoming granular and even fungous, while there is also a more abundant purulent secretion. Mr. WHITEHEAD is entitled to the credit of pursuing the investigation and greatly extending our knowledge of diseases of the uterus, especially of the cervix, in the pregnant state, which may eventuate in abortion, and I will offer a brief synopsis of his classification of them. Under the general expression of *disease of the lower part of the uterus*, he includes the following lesions:—

1. *Inflammation and superficial erosion*, implicating one or both lips of the os uteri, and more or less of the external and internal cervix.

2. *Varicose ulceration*, commonly occupying the back part of the anterior lip, sometimes confined to the posterior, and occasionally implicating both. It gives rise to hemorrhages obeying, more or less perfectly, the menstrual periods and to purulent discharges in the intervals.

3. *Œdema of the Cervix.*

4. *Fissured ulceration* of one or both commissures, of the anterior or posterior lip, or implicating all these parts at the same time.

5. *Induration of the cervix*, with or without abrasion of surface.

6. *Endo-uteritis*, or inflammation of the lining membrane of the uterus, affecting the body as well as the neck, and sometimes accompanied with induration of the cervix or erosion of one or both lips of the os uteri.

7. *Follicular ulceration.*

8. *Gonorrheal inflammation*, affecting the lips and adjacent cervix, and especially liable to spread to the lining membrane of the entire organ.

9. *Syphilitic disease*, in its primary, secondary and tertiary stages.

10. *Prolapsus uteri*, which owes most commonly its existence to disease of the lower part of the uterus, as the primary exciting condition.

Not only has abortion been traced by Mr. WHITEHEAD to these several lesions, mostly of the cervix, but he even assigns to each its causal proportion and indicates the period of pregnancy when each is most apt to occasion abortion. Thus, inflammatory ulceration was the cause in 26 in every 100, and the event happened between the middle of the sixth and the middle of the ninth month of pregnancy. Varicose ulceration induced abortion in 6 or 8 out of every 100, and it operated during the latter two or three months. Œdema of the cervix, acting likewise in advanced pregnancy, prevailed in about 1 in every 25 or 30 cases. Fissured ulceration was found to exist in 20 to 24 out of every 100 cases, and may cause abortion from the fourth to the middle of the seventh month of uterogestation. Endo-uteritis is a common cause of abortion during the early months. It may implicate the cavity of the cervix only, or involve the whole lining membrane of the womb.

The argument does not need greater amplification:—what has been declared is sufficient to warrant the affirmation that if any pathological doctrine can be established by clinical observation, then has Mr. WHITEHEAD proved, beyond all reasonable doubt, that inflammatory disease of the cervix uteri is a frequent cause of abortion. If this be not the irresistible conclusion from his premises, then is all clinical experience futile and all ratiocination a vain delusion.

Let us inquire now, very briefly, whether cervical disease can be considered a cause of sterility and thus affect fecundity by preventing conception, while abortion acts by bringing to naught its product.

Sterility may doubtless be attributed to a variety of causes, some of which, such as lesions, or malformations of the fallopian

tubes and ovaria, it may not be possible to discover during life. But there can be no doubt that, in a certain proportion of cases, inflammation of the cervix uteri constitutes the only assignable cause, the efficacy of which, as a barrier to conception, is proved by fecundation taking place subsequent to the subdual of the inflammation. I must not be understood to assert that inflammation of the cervix is necessarily and in every instance a cause of sterility, for many exceptions have come to my personal knowledge and doubtless the malady often exists antecedent to the pregnancy which it destroys by abortion. What may be affirmed, nevertheless, without the fear of successful contradiction, is the co-existence of such inflammation and sterility, the removal of the inflammation being followed by cure of the sterility, in too many instances to admit of the belief that they were merely coincident.

When sterility results from this cause, it is probable that the inflammation affects the lining membrane of the cervix and not unfrequently also that of the body,—the former being the malady described by MELIER and denominated *cervicitis* by WHITEHEAD; the latter, *endo-uteritis* of the last named author. When the affection is restricted to the exterior of the neck, it is not so apt to interfere with fecundity, although it may, as we have seen, blight its fruit and occasion abortion. The reason of the difference, in this respect, between external and internal inflammation of the neck is probably found in the obstruction of its canal by glairy mucus in the latter, offering an impediment to the intromission of spermatozoa, whose access to the ovule is known to be essential to fecundation. Be this as it will, you may observe that all the cases of sterility detailed by WHITEHEAD were accompanied with *endo-uteritis*, and some of the patients, who had undergone a tedious matrimonial probation, became fecund after being cured of their malady.

2. *Parallel between the two classes of cases in respect to their influence upon menstruation.* Are manifestations of menstrual disorder alike or diverse in ulcerative and non-ulcerative cases? There is, as Dr. WEST alleges, a general correspondence between them, and he gives a tabulated statement, comprising a gross total of one hundred and thirty-eight cases of anomalous uterine disease without ulceration, and one hundred and twenty of ulcera-

tion, showing the manner in which the menstrual discharge was affected. I need not go into the details; it is sufficient to say that the difference between the two classes is not great—menstruation being natural or suppressed, irregular or scanty, painful or profuse in both, in nearly the same per cent. It is only remarkable that in those cases where there was ulceration there was somewhat greater activity of the sexual function. "In them, pregnancy or lactation was more frequent; scanty, irregular, suppressed, or painful menstrual was rarer; while excessive or over-frequent menstruation occurred with greater frequency." From which we are to conclude, I suppose, that ulceration only quickens the uterus in the performance of its functions! There is, I think, some inaccuracy in the observation of these cases; at all events, painful menstruation is more frequently connected with inflammation than is here exhibited. But admitting the truthfulness of his observations, still, on the principle which I have endeavored to establish, in all the cases of deranged menstruation in which no other cause could be assigned, the ulceration is fairly entitled to claim the paternity, and these make its progeny as numerous as that of all other causes united.

3. *Parallel between the two classes in their relation to leucorrheal discharges.* The object of the comparison is to determine whether such discharges are more frequent, more profuse, or furnished from a different source where ulceration exists, than in cases where it is absent. These particulars are exhibited, as usual, in tabular form; nearly an equal number of cases of leucorrhea with and without ulceration are contrasted, from which it is to be inferred that leucorrhea is nearly as often met with and may be equally profuse, where there is no ulcerative disease whatever. The source of the discharge was determined in eighty of the non-ulcerative, and eighty-five of the ulcerative cases, viz:—in fifty-four of the former, it was from the uterus, in nineteen from the vagina, in seven from both—80; while in fifty-three of the latter the discharge was from the uterus, in six from the vagina, in eight from both, also, in twelve, in an appreciable degree, from ulceration, in only six from ulceration alone—85.

By the discharge being from the uterus, Dr. West evidently means from the body of the organ, for in remarking on opinions

contrary to his own, he says: "The discharge is supposed to be furnished either from the ulcerated surface itself, or from the inflamed and irritated canal of the cervix." This table, if it is to be received, develops the most astounding of all the disclosures of our lecturer, seeing that leucorrheal discharges have their source in the body of the uterus, whether there be ulceration of the os or not; in twelve cases, truly, the oral ulceration helped to swell the tide, but in only six was it the *fons et origo!* I am free to confess that, if it can be established by accurate observation that leucorrhea is independent of disease of the cervix, to the extent indicated by this table, the controversy is ended and Dr. WEST has exploded a pernicious error. The cervix is, in my opinion, the predominant and almost exclusive seat of leucorrhea, and to this portion of the uterus are nearly all local remedies for the malady addressed, which would be nugatory, of course, could it be proved that it arises from a higher source. Oppugnant to our doctrine and practice as are these statistics of leucorrhea and decided as is the vantage gained by them, if credited, Dr. WEST submits, for the present, only a few modest comments and leaves them to make their own impression upon the reader. The strong current, thus put in motion, only sinks, however, Arethusa-like, to reappear in the third lecture, where I shall endeavor to stem it.

4. *Parallel between the two classes in respect to the accompanying pains.* Comparison extended to another symptom, seldom absent in uterine affections, namely, pain, shows, as Dr. WEST thinks, a close correspondence between the two classes of cases. In both, the seat of pain is various; it may be in the uterus, in the back, the pubic or iliac region, or in two of these regions at the same time. A table turns up again, exhibiting one hundred and forty-three cases in which there was no ulceration and one hundred and twenty-five in which ulceration existed, and the seat of pain is specially indicated. All that is conceded to the ulcerative cases is, that the pain accompanying them is usually more generally diffused over the whole pelvic region. Pain is not to be regarded as characteristic of ulceration, either on account of its intensity or seat, and it is, every way, too unimportant in this discussion to merit the notice bestowed on it by Dr. WEST. Let it be conceded that any disease of the uterus may be attended with pain.

5. *Parallel between the two classes of cases in reference to the appreciable organic condition of the uterus.* This, as well as the other points of the inquiry, is sought to be illustrated by a tabular statement, setting forth the state of the womb, so far as it could be ascertained, in the ulcerative and non-ulcerative cases. The table (No. VIII.) comprises one hundred and thirty-nine cases of non-ulcerative and one hundred and twenty of ulcerative disease; the uterus (meaning the body) was apparently healthy in twenty-nine of the former and thirty-six of the latter; not healthy in some respect or other in one hundred and ten of the former and eighty-four of the latter. The deviations from a healthy state, indicated in the table, consisted in misplacements, enlargements, or indurations of the body or neck, affecting one portion only or both, at the same time. It would be uninteresting to go into the details, nor is it at all necessary. It will be sufficient merely to indicate their bearing on the question at issue. Dr. West thinks that this table exemplifies the same general correspondence between the two classes of cases; he admits, however, that enlargement of the body of the uterus and enlargement or induration of the cervix existed much more frequently in connection with ulceration of the os uteri than independently of that condition. Still he maintains that cases of enlargement and induration, unconnected with ulceration, are sufficiently numerous to repel the assumption that the latter is the cause of the former. "Moreover," says he, "in two-thirds of the cases where ulceration was absent, and in one-third of those in which it was present, the enlargement was confined to the body of the womb —a fact easily reconcileable with the belief that that part of the organ, as it is of the greatest physiological importance, so is also the more frequent seat of the gravest pathological processes, or, at any rate, their most usual point of departure."

That the body of the womb may be enlarged by other causes than ulceration of the orifice, I have no wish to deny. There is no reason why that portion of the organ may not be the primitive and exclusive seat of disease; at the same time, it cannot, I think, be doubted that inflammation may be propagated from the neck to the body, as described by Meleir, and there is good reason for the belief that, in all cases wherein both portions of the womb are

implicated, the usual point of departure of morbid action is, contrary to Dr. WEST'S opinion, the cervix instead of the body. In support of this view, it may be observed that the neck is far more frequently diseased than the body,—this table itself showing that while the body alone was enlarged in twenty cases of non-ulcerative, and twelve of ulcerative disease—32, the cervix alone was enlarged or indurated or both in thirty-four non-ulcerative, and twenty three ulcerative—57, which is nearly in the proportion of two to one, and yet falls short, I suspect, of the real preponderance of cervical over corporal affections of the womb. Now, let it be granted, as it must, that inflammation may spread in either direction along the continuous mucous lining of the uterus, and it necessarily follows that when both portions of the organ are found to be alike involved, the probability is at least as two to one that the morbid action commenced in the cervix.

"It also seems questionable, from the data which this table furnishes, whether induration of the os or cervix uteri is so generally dependent on ulceration of the os uteri as has been asserted, since it was present in forty per cent. of the cases where no ulceration existed. Besides, if such a connection as that of cause and effect subsisted between ulceration of the os uteri and induration of its cervix, or even if there were any necessary relation of degree between them, we ought to find the most extensive ulceration coexist with the greatest hypertrophy and most considerable induration; while slight ulceration of the os, and an otherwise healthy state of the cervix, might be expected to be usually found together. Facts, however, do not bear out this opinion."

Here follow two tables (IX. and X.) the first showing the different *seats and comparative frequency* of different forms of ulceration, and the second, the *degree*, marked "slight," "moderate," and "extensive," in which they existed. These tables possess no special interest and are of no importance to any one except Dr. WEST himself, who produces them merely to subserve a particular purpose, namely, to show

"1st. That in 25 out of the 46 cases in which the ulceration is stated to have been slight, more or less considerable induration or enlargement of the lips or neck of the womb was present.

2nd. That in 9 out of 16 cases in which the ulceration was stated to have been considerable, there was no induration nor enlargement either of the cervix or os uteri.

The argument is, I readily grant, conclusive against *ulceration*

being the cause of enlargement or induration either of the neck or body of the womb; but it has no relevance and is utterly powerless when applied to *inflammation*, which, as already shown in my first lecture, is really the disease in controversy. Ulceration, enlargement, and induration are all sequences of inflammation and there is no more reason to ascribe enlargement to ulceration than ulceration to enlargement, nor has any writer displayed such pathological imbecility, as is here imputed. Dr. West cannot be ignorant of the doctrines he criticises and his perpetual resort to a quibble,—substituting ulceration for inflammation, and making it the butt of his animadversions,—completely strips him of the cloak of fairness, which he affects to wear and is at such pains to display to the best advantage. These several lesions being only sequences of inflammation, we should expect that when one exists in an unusual degree, the others may be in abeyance. When, for instance, inflammatory action expends its whole force upon the mucous membrane, extensive ulceration with no apparent enlargement may be the consequence; but should the subjacent tissue become implicated, evinced by enlargement from deep-seated congestion, the result may be effusion of coagulable lymph and permanent induration, with little or no superficial ulceration. Such enlargement and induration of the cervix is a very common pathological condition, and whenever it is met with we may safely attribute it to inflammation. whether other evidence of that pathological state happen to be present or not. Ulceration may also persist after the subsidence of active inflammation, serving to complicate the results of that morbid process and being itself only an effect of their common cause, inflammation.

Bibliographical Notices.

Art. II.—*Practical Observations on Aural Surgery and the Nature and Treatment of Diseases of the Ear.* With Illustrations. By William R. Wilde; Fellow of the Royal College of Surgeons in Ireland; Surgeon to St. Mark's Ophthalmic Hospital. Philadelphia: Blanchard & Lea. 1853. pp. 475, 8vo. [*Continued from the January number.*]

The condition of the digestive organs exerts less influence over inflammatory affections of the ear than those of the eye. The bowels, however, in this as in all other febrile diseases should be kept open. The use of tne means calculated to allay inflammation and febrile disturbance, should be had recourse to. The skin being generally hot and dry, sudorifics, are, in the early stage of the disease, decidedly indicated. Having leeched, fomented and purged, James's powder, combined with small doses of blue pill and henbane, will be found very efficacious.

In the more advanced stage of the disease and after proper depletion, blisters are highly advantageous.

The symptoms remaining unrelieved after the employment of all these means, mercury should at once be had recourse to. Our author is so fully convinced not only of the utility, but of the urgent necessity of employing mercury in these aural inflammations, that he does not hesitate to recommend its use in the early stages of all such affections. When it is employed early, it produces, as soon as its constitutional effects are manifest, a well marked improvement in all the symptoms. The patient should be kept under its gentle influence for some days.

The speculum should be used daily. If an ulcer be discovered it should be touched with a solution of nitrate of silver. If otorr-

hea occur, the discharge should be removed by very gently syringing the part with simple warm water. No stringent injections whatever should be employed while the inflammatory action runs high.

Subacute myringitis though a perfectly painless disease, is equally destructive to hearing. Persons between fifteen and thirty are most subject to it. Deafness, coming on rather suddenly, is often the first symptom noticed by the patient. The auditory canal does not usually exhibit signs of disease, but the ceruminous secretion is arrested. When seen early, the membrane is always of a pink color, of a tint somewhat paler than that of the monthly rose; its transparency and polish are seldom much affected at first. If treatment be not resorted to, the membrane becomes thickened, and opaque, from deposits of lymph, and irremediable deafness ensues. Mercury is as essential in this disease as in acute myringitis. To be effectual however, it must be slowly introduced into the system, so as to produce a steady and gradual effect, which should be kept up "until there is a decided improvement both in the vascularity and hearing or until all hope of restoration has been abandoned. After the constitution has been fully affected by the mineral, the bichloride, given in doses from the sixteenth to the eighth of a grain, dissolved in proof spirits, and taken in half an ounce of the cold infusion of bark, a scruple or half a drachm of Huxham's tincture, three times a day, will be found highly efficacious. The preparations of iodine are also, in the advanced stages of the disease, worthy of trial; but I do not think that the preparations and combinations of iron produce in aural inflammations the same benefit which they do in constitutions laboring under ophthalmic affections of a like character."

"To relieve tinnitus aurium, after the inflammatory action has been subdued, or the original disease which produced it has subsided, and particularly in cases where we find this symptom present without any apparent lesion of the parts we are able to inspect, I have found the preparations of the Arnica montana of decided benefit; indeed it is the only medicine with which I am acquainted that seems to possess a specific power over this annoying and usually most intractable complaint. The preparation I find most efficacious is the tincture both of the flowers and leaves, of which the patient should commence by taking fifteen drops in

a tablespoonful of the infusion of Arnica, with some cordial tincture three times a day. After a few days the dose should be increased one or two drops daily, till it reaches thirty, or even more, unless headache or giddiness be produced, when we should at once lessen the dose, or omit the medicine altogether for a short time. The state of the bowels should be carefully attended to during the administration of this drug."

Syphilitic myringitis, gouty otitis, strumous myringitis, otitis in connection with ophthalmia, and typhoid and exanthematous inflammations of the membrana tympani, are next treated of in a most lucid and satisfactory manner.

Chronic myringitis is a very frequent cause of deafness. In the tables of our author no less than one in every six cases of deafness were attributable to this cause.

There are two special forms of chronic myringitis that constantly present themselves—one a perfectly painless deafness; the other attended by paroxysms of pain, occurring at intervals, between which the patient is entirely free from all uneasiness. "The latter is much more common among females from twenty to forty, and is at times accompanied by irregularities of the uterine functions. The appearance of the membrana tympani is too peculiar to be mistaken; it presents a general thickening and opacity, particularly of its lower portion; besided which there is almost invariably a number of spots, about the size of pin heads, of greater density than the rest, and of a pearly lustre, studded over the surface of the membrane. In many cases it presents the appearance of crumpled parchment. During the quiescent periods, we only remark a few straggling vessels, carrying red blood, spread over the surface of the membrane, and, for the most part coursing from above downwards, parallel with the handle of the hammer. Upon any provocation, however, such as cold, or other exciting causes, the membrane will, in a few hours, and often without any increase of pain, become an uniform dark-red color, precisely like *pannus* of the cornea, a disease of which it is the manifest analogue. The gr ater the amount of thickening and opacity, the less will be the quantity of vascularity and redness which the membrane is capable of assuming, as we perceive in cases of dense opacity of the cornea, owing, no doubt, to the greater quantity of deposit obstructing the flow of red blood, by diminishing, and,

perhaps, also obliterating, the calibre of the vessels. In such cases the membrane is often insensible."

Little can be done in such a case. Lunar caustic, in solution, applied every third or fourth day, upon the opaque membrane, and if there be much vascularity present, the application of a few leeches, twice or thrice a week, constitute the only means that are likely to be serviceable.

"In the cases of periodic pain, with a higher degree and more generally diffused vascularity, the application of leeches, every second or third day, will be found most efficacious, at the same time that the patient should be brought under the gentle influence of mercury, and kept so for at least a month."

The most frequent and apparent result of each and all of the foregoing varieties of inflammation in that structure, says Mr. WILDE, is thickening and opacity of the membrana tympani. This condition of the membrane is as difficult of cure as the same appearance in the cornea. Counter irritation over the mastoid process, and painting the surface of the membrane with a solution of lunar caustic, of from ten to twenty grains to the ounce, twice a week compose the staple of the treatment. Our author has tried iodine and other substances, but gives nitrate of silver the preference.

Artificial preforation of the membrana tympani is not regarded by Mr. WILDE as being of either such general use or applicability as is commonly believed. He remarks of it, "there has not been, perhaps, in the whole history of medicine during the present century a discovery to which so much praise was at the time awarded, that subsequent investigation and experience have, to say the least of of it, so much disparaged."

The operation was performed by ITARD in a great number of instances, but without any determined beneficial result. The only true indication for the preforation of the membrana tympani, is, according to KRAMER, afforded by the thickening of the membrane, unaccompanied by any other disease of the ear. Mr. WILDE thinks there are very few cases, indeed, in which it will be found efficacious. The operation requires very great caution and dexterity in its performance. When it becomes necessary our author suggests the following as the best method to be adopted.

The membrane is first to be brought fairly in view, under bright, direct sunlight, and the patient made to inflate the tympanum, so as to render the membrane tense. The point of a small sickle-shaped knife, with a double cutting edge, is then introduced into the inferior, thin, vibrating portion, and drawn downwards and forwards, and a simple incision of the membrane, about a line and a half in length, accomplished. This procedure is so simple and painless, that the patient is often unconscious of its performance until made aware of its completion by the air rushing out through the aperture. If left in this condition, the wound would soon heal up; therefore, a very fine probe, fixed in a handle, and slightly pointed with nitrate of silver by being immersed in the caustic when heated to fluidity, should be immediately passed down into the perforation, the edges of which are thereby cauterized and prevented adhering; and this latter process should be repeated from time to time, as often as the wound shows an inclination to heal, and until we establish a sufficiently large elliptical opening.

Accidental perforation of the tympanal membrane may occur from a variety of causes. When the result of inflammation, otitis is the form of disease which most frequently gives rise to it.

The cause, duration and extent of the aperture will in a great degree, determine the success of the treatment—if produced by ulceration it is more unpromising than when the result of mechanical injury, or accumulated fluid.

Our author after a long and fair trial of several means proposed for the cure of these perforations, believes there is nothing like nitrate of silver. In order to derive the full benefit of the escharotic, it should be applied by means of a probe, "upon the extreme edge of the aperture, or rather within the ring of the opening, every second or third day, so long as the part seems inclined to close, but the moment we perceive it enlarging, a day or two after the application, we must desist."

Acute otitis is an affection the causes and symptoms of which it is not necessary for us to describe in this place. They are familiar to every practitioner.

The terminations of the disease are not so well understood. They are three fold:—First, resolution; Second, rupture of the

tympanal membrane; and Third, the inflammatory process spreads from the cavity of the tympanum to the mastoid process, producing disease of that bone. The last, it need not be remarked, is a matter of no little danger.

The treatment advised in acute myringitis, carried to the fullest extent, is imperatively demanded in acute otitis. Mr. WILDE regards mercury even more necessary here than in myringitis; it should be commenced at once and with a two-fold object; to arrest the disease in the ear, and should it fail in so doing, to check its inward progress to the brain.

Exanthematous otitis derives great interest from the affections with which it is associated. It occurs more frequently perhaps in scarlatina than any other of the exanthema, and our author states that the most unmanageable cases of otorrhœa with which he has ever met, those in which most destruction has taken place, and where the ossicula have been most frequently lost, have been the result of scarlatina or measles.

The remainder of chapter vii. is devoted to chronic otitis, facial paralysis, diseases of the Eustachian tube, throat deafness, &c. We have not space to do more than mention these affections.

Nervous deafness occupies the greater part of chapter VII. Our author regards this as a disease much more rarely encountered than is usually stated in the books. It generally occurs between twenty and thirty-five years of age—usually commences on one side, but sooner or later extends to both ears—patients invariably hear worse on being in any way excited—tinnitus is a frequent but not an invariable attendant, &c.

Nervous deafness must be treated according to its cause. Almost every mode of treatment has been advised. KRAMER is in the habit of introducing the vapor of acetous ether into the tympanic cavity through the Eustachian cavity. Other aurists recommend purgation and acting on the mucous membrane; others, again, use emetics; others mercury, and others electricity and galvanism. Mr. WILDE declares however, that none of these various and manifold modes have had the desired effect.

For confirmed cases, our author has nothing to offer but an ear trumpet and a strong recommendation not to quack. For incipient nervous deafness, in which he thinks much may be done, if

not to restore the hearing, at least to arrest further progress of the disease, and avert total deafness, he advises long continued counter irritation, the judicious use of mercury persevered in for months, and attention to the general health. With the exception of counter irritants behind the ears, Mr. Wilde entreats his readers carefully to abstain from all topical applications.

The concluding chapter of the work treats of *Otorrhea*, and we intended in the outset, to have given considerable space to this subject, but we have already extended our notice to perhaps greater length than is either judicious or desirable. We cannot refrain, however, from sketching the outlines of this most interesting disease, even at the risk of wearying the patience of some of our readers.

Mr. Wilde says otorrhœa, or a discharge from the ear, is the most frequent aural disease of Great Britain. The same, we believe, may be said of the affection in this country. In the tables, to which we have already referred, it amounted to 647 in 2385 cases registered from all causes, or about 1 in every 3¼. It is a disease of infancy and youth; it seldom appears in middle life, and still less frequently in advanced age. The principal causes of otorrhea have been enumerated in our remarks on the various inflammatory affections of the ear. Our author believes if there is one disease more than another that shows a strumous constitutional taint, it is otorrhœa, particularly that form of it which appears in young persons and children without any apparent cause.

Otorrhœa may be produced during the progress of scarlatina and measles—either by direct extension of the inflammation of the skin into the external meatus and tympanal membrane; by the diseased condition of the mucous membrane of the throat passing up through the Eustachian tube, or, finally, by the abscesses which occur in the neck and around the meatus, opening into the fibro-cartilaginous portion of that tube.

Two questions of vital importance in the treatment of otorrhœa present themselves:—one as to *prognosis;* the other, as to the *morbid changes* to which long neglected aural discharges may lead. The prognosis should always be cautious, unless we see our way through the case very clearly, for the reason that, "*so long as otorrhœa is present, we can never tell how, when, or where*

it will end, or what it may lead to." Mr. WILDE remarks whether the disease has arisen from constitutional taint, as a painless running on the one hand; or whether it be the result of scarlatina, owing to acute inflammation, and suppuration of the tympanum, on the other; it is always difficult to manage. If the case be of long standing, the discharge becomes like that which arises from a fistula, and its treatment is very tedious; and in no case should the patient be promised permanent relief until we have assured ourselves of the total extent of the parts engaged.

The *treatment* in simple external otorrhœa as found most useful by our author, consists in paining the surface engage with a solution of nitrate of silver, ten grains to the ounce, with a fine camel's hair pencil, or, preferably a bit of cotton on the end of a probe. This should be repeated every second day. Syringing the ear with plain tepid water night and morning for the purpose of ensuring cleanliness, should be practised; "and at night a slightly astringent lotion may be poured into the ear until it fills up the meatus, and allowed to remain there for a few minutes with the head bent to the opposite side, and then permitted to run out. The syringing, must not, however, be overdone; as soon as the discharge begins to moderate, it should be had recourse to less frequently."

"The various salts which enter into the general composition of eye collyria are here particularly applicable, especially those of alum, lead, zinc, and copper. I formerly applied the lead lotion very extensively, but I have found that it frequently, even without coming in contact with diseased bone, produces a blackened discharge: when it is used, the liquor plumbi will be found the safest and most efficacious preparation; and the lotion may be preserved clear, and either rose or elder-flower water employed, by the addition of a few drops of acetic acid. The liquor aluminis composition of the London Pharmacopœia is that which I now most frequently prescribe. Solutions of tannin will also be found useful astringents.

If upon examination we find the meatus thickened, and it and the surface of the membrana tympani pink and vascular, a leech or two, according to the age and strength of the patient, should be applied every third day, several times. When the discharge is fetid, a chloride of lime lotion used occasionally is of service, being slightly astringent, and correcting the disagreable smell."

In regard to the constitutional treatment, if we have reason to

believe, that the state of the general health assists to keep up the local disease, our author recommends cod-liver oil and Peruvian bark: the former as an anti-strumous fattener; the latter by altering the established tendency to morbid secretion. Mr. Wilde has seldom found it necessary, however, to prescribe any course of alterative medicine, unless in cases of marked strumous habit, and when the glands of the neck are diseased. If the aural discharge has broke out or the subsidence of disease of the skin or any vicarious outlet, or the child has had convulsions in infancy, or disease of the brain has appeared in other members of the family and their like exceptional conditions, "drains" and counter irritation may be required. Under ordinary circumstances our author does not advise them.

Small abscesses sometimes form round the mouth of the meatus and fresh attacks of otalgia occur towards the close of an otorrhœa from simple chronic otitis, especially in children. Mr. Wilde regards these as "best warded off by the application of a vesicating liniment behind the ears, and keeping up gentle counter-irritation for some little time after the otorrhœa has ceased. For this purpose the croton oil dissolved in soap liniment, or the tincture of iodine, made stronger and more soluble by the addition of a little hydriodate of potash or the acetum lyttœ, answers very well."

In cases of long standing otorrhœa, when the discharge is ceasing, either spontaneously, or as the result of treatment, in very many instances the dermal lining will be found to have become enormously thickened; and the cuticle to be thrown off in patches, sometimes filling up the passage completely. This condition of things will in most instances be quickly righted by first syringing the ear well and removing all the thickened cuticle that remains through the speculum, with the spatula and a pair of slender forceps; "the parts may then be touched with a solution of lunar caustic, and when the discharge has ceased, and the cuticle has become thinner and less white, the cure may be completed by the application of ung. hydrarg. nitros dil., laid on warm with a camel's hair brush."

Morbid vascular growths are among the complications that render otorrhœa at all times tedious and difficult to heal. Of these, *Granulations covering over the face of the membrana*

tympani are set down by our author as not being unfrequent. The solid nitrate of silver rubbed over them every second day, or oftener, if necessary, is esteemed by Mr. Wilde as the best means for their removal.

Polypus, caries and cerebral affections consequent upon otorrhœa engross the remainder of the chapter. D. W. Y.

Art. III.—*A Practical Treatise on Foreign Bodies in the Air Passages.* By S. D. Gross, M. D., Professor of Surgery in the University of Louisville, etc., etc. With Illustrations. Philadelphia: Blanchard & Lea. 1854. 8vo., pp. 468.

When Dr. Gross first particularly directed his attention to the study of foreign bodies in the air passages, it was with the view of preparing a short monograph on the subject for this Journal. As he proceeded, however, with his researches, the subject grew in interest and extent until finally, in his hands, it has taken the form of a handsome octavo of nearly five hundred pages. We are informed in the preface that the materials of the volume have been derived, partly from personal observations, and partly from the experience of professional friends, but mainly from the various medical journals of the United States, Great Britain, and the Continent of Europe. The number of cases derived from the first two sources and which now, for the first time, meet the public eye, amounts to nearly fifty.

The labor involved in the task of this magnitude has been neither little or light. Dr. Gross found the whole subject in a state of chaos. He could turn to it in no tangible or connected form, but was obliged to seek his facts in the almost endless field of periodic literature.

Our author's first care was to collect the facts together; his second, to analyze and compare them with each other; and the third, to deduce from them such conclusions, general and particular, respecting the nature, symptomatology, pathology and treatment of foreign bodies in the air passages as the premises might fairly warrant. In so doing, he has prepared the first elaborate and complete monograph which has ever appeared, in any language, on foreign bodies in the air passages.

Chapter I. is devoted to the description of the nature, alterations, situation, entrance and expulsion of foreign bodies.

One cannot fail being surprised at the exceedingly diversified character of the bodies that may enter the air tubes. The catalogue collected by our author which comprises the most common and important of the bodies that have yet been found in these situations, contains the names of an almost infinite variety of substances in both the vegetable, animal and mineral kingdom. Arranging them into different classes, according to the nature of their composition, and observing the order adopted above, we have among the first, beans of almost every description; grains of corn, cockle burrs, nuts and nut-shells, sealing wax; tamarind, cherry, apricot and persimmon stones; charcoal, fiddle peg, &c., &c.

Of bodies derived from the animal kingdom our author enumerates bits of hard boiled egg, beef, veal, tendon, and bone; worms, leeches, locks of wool, teeth—natural and artificial—human and animal; flies, lobster claws, &c., &c.

The number of mineral substances that find their way into the air tubes is quite considerable; as buttons; pins; needles; tacks; nails; glass; bullets; marbles; gold, silver and copper coins, &c., &c.

Of all the substances that we have named and more than a hundred that we have not named, those which most commonly enter the air passages are grains of corn, beans, melon seeds, cherry stones, pebbles, and bits of meat, bone or gristle. "In the West, the first of these bodies are, perhaps, oftener found in the windpipe than any other." "In France, Germany, and England, the most common foreign bodies appear to be beans. Pieces of coin, pins, buttons, and similar articles, in consequence of the foolish

habit, so common in almost every part of the civilized world, of holding such substances in the mouth, are often entrapped in the air-tubes."

Several foreign substances may enter the air-tubes either simultaneously or successively. A case occurred in the practice of our author in which a sprig of cedar was first inhaled, and about five weeks afterwards a piece of sewing silk, which were ejected at separate intervals. The most remarkable example perhaps, of the multiplicity of foreign bodies was reported to Dr. Gross by one of his former pupils. It happened in a child only eighteen months old. Larygotomy was performed. Six fragments of parched corn, one nearly the size of half a grain, were ejected immediately after the operation and the same number during the course of the same day and evening.

Foreign bodies of a vegetable or animal nature, acted upon by the heat and imbibing the moisture of the surface with which they are in contact, may become swollen and softened. Cartilage and tendon, apple, cabbage, turnip, carrot, and similar vegetable substances are exceptions to this rule. The same is true of hard boiled egg and roasted meats generally. The degree of this expansion and softening varies so much in different cases and in different circumstances as to admit of no precise statement. The particular situation of the foreign body has, it is thought, some influence upon the change of bulk and consistence effected during its sojourn in the windpipe. A substance impacted in one of the bronchial tubes would, in the opinion of our author, be likely to experience this change in a greater degree as well as more rapidly, than one lodged in the trachea or larynx.

Some practitioners, it seems, entertain most absurd notions respecting the softening power of the air-passages in this accident. A case is recorded where the question of operation was decided against on the ground that if the offending substance was a piece of gristle it might be softened and coughed up. Now while the softening process is sometimes carried so far as to break down the foreign substance, or to convert it into fragments, which are afterwards ejected separately, or *en masse*, we can by no means anticipate such a result save in very rare instances—at least, it can but be regarded as a most remote contingency.

If the foreign body be long retained, it often becomes encrusted with various kinds of matter. This is more likely to occur when it occupies the bronchial tubes than when it is situated in the larynx or trachea.

"The foreign body may be arrested in different portions of the windpipe, or it may remain loose, and move up and down the canal during the expulsion and introduction of the air. Occasionally it is stopped at the very entrance of the larynx; but more frequently, by far, it passes into the interior of this tube, and lodges in one of its ventricles.

How many persons have perished, perhaps in an instant, and in the midst of a hearty laugh, the recital of an amusing anecdote, or the utterance of a funny joke, from the interception at the glottis of a piece of meat, a crumb of bread, a morsel of cheese, or a bit of potato, without a suspicion, on the part of those around, of the real nature of the case! Many a coroner's inquest has been held upon the bodies of the victims of such accidents, and a verdict rendered that they died by the visitation of God, when the actual cause of death lay quietly and unobserved at the door of the windpipe of the deceased."

The foreign body may be arrested in the interior of the larynx, or it may descend into the trachea, or fall down into one of the bronchial tubes, more commonly the right. It is almost needless to remark that its disposition in any portion of the windpipe, will be influenced in a great degree, by its form, size and weight. Thus, for instance, a small and smooth body will, in general, be more likely to pass beyond the larynx than one that is large and rough, and a heavy substance than one that is light.

When the foreign body is arrested in the larynx, it may occupy one of the ventricles of Morgagni, or it may be engaged between the vocal chords. "Occasionally, though rarely, it is stopped in the inferior portion of the tube, or partly in the larynx and partly in the trachea."

The extraneous substance is not often arrested in the trachea, or if arrested does not long remain in it. Sharp and slender or very rough and angular bodies in consequence of their extremities becoming implanted in the walls of the trachea constitute occasional exceptions to this rule.

"The disposition of the foreign substance in the bronchial tubes varies according to a number of circumstances, of which the principal are the relative capacity of those tubes, or, rather, the situation and arrangement of the septum by which they are united to each other, and the configuration, volume, and weight of the intruding body."

It is a well ascertained fact that foreign bodies, upon arriving at the inferior extremity of the trachea, have a much greater tendency to pass into the right bronchial tube than the left. "The true cause, undoubtedly, is the peculiar position and arrangement of the *septum* at the root of the trachea, indicating the line of junction of the two bronchial tubes. This septum, spur, or ridge, to which from its situation, the term bronchial may be appropriately applied, is not, as will be seen hereafter, in the mesian line, but decidedly to the left of it, as may be shown by a perpendicular line extending from the centre of the rima of the glottis to the corresponding point of the inferior extremity of the windpipe, properly so called. Hence a body, especially one of considerable bulk, often having passed the larynx, will be very likely by striking this septum, as it will be apt to do in its descent, to be pushed over towards the right side, its entrance into the corresponding tube being still further favored by the greater diameter of this tube." The fact, of which the above is a most satisfactory explanation, is one of much importance in both a pathological and practical point of view. The question of the relative frequency of the situation of extraneous substances in different portions of the air-passages is, as our author remarks, one of great practical moment. An analysis of the cases contained in this report affords, concerning this point, the following results:—

"The number of cases of death, without operation and without expulsion of the offending body, is twenty-one. In these the substance was situated, in eleven, in the right bronchial tube; in four, in the larynx; in three, in the trachea; in one, partly in the trachea and partly in the larynx; in one, in the "lung;" and in one in the right thoracic cavity. In not a single instance did it occupy the left bronchial tube.

In thirty-four cases, subjected to operation, or general treatment, the extraneous substance was situated twice positively, and eleven times probably, in the right bronchial tube; four times certainly, and four times probably, in the left bronchial tube; seven times

positively in the trachea, and fourteen times positively in the larynx. In two of the above cases a careful examination of the chest, during life, rendered it evident that the foreign substance, although found in the left bronchial tube after death, occupied the right tube of that name during the greater portion of the time which intervened between that event and the occurence of the accident."

When a foreign body is retained for any considerable period, it either becomes encysted, and is thus rendered comparatively harmless; or, as more generally happens, it sets up irritation in the surrounding parts, which in one case, perhaps, prepares the way for its own expulsion, while in another it may produce such ravages as to destroy the patient.

Foreign bodies do not, as might at first be supposed, always reach the windpipe by the route of the glottis. Occasionally they enter the tube from without, either by penetrating the skin and muscles of the neck, or by gaining ingress through an artificial opening, as in wounds of the throat. The amount of distress and danger consequent upon a foreign body entering the trachea from without is as great as when the extraneous substance is introduced by the natural channel.

"Foreign bodies sometimes lodge in the *pharynx*, and from thence pass into the larynx, either by their own efforts, or, more properly speaking, in consequence of the pressure exerted upon them by the neighboring parts, or in consequence of the means employed to extract them."

The glottis, as has been remarked, is the route by which foreign bodies usually enter the air-passages. They are generally expelled by the same course. The expulsion may occur spontaneously, it may be effected under the influence of various remedies, as emetics &c., &c , inversion of the body and bronchotomy. Whether by one means or the other there is no certainty in regard to the period of its occurrence. Bronchotomy itself does not always insure the immediate riddance of the foreign body.

Chapter II. contains an exceedingly satisfactory account of the *immediate effects of foreign bodies*. Chapter III. is devoted to the consideration of the *pathological effects of foreign bodies*.

The *Symptoms of foreign bodies* are detailed with great minuteness in chapter IV., and the *diagnosis of foreign bodies* forms the bulk of chapter V. *The spontaneous expulsion of*

foreign bodies, the medical treatment, the surgical treatment, bronchotomy, tracheotomy, their dangers and difficulties are treated of in chapters VI., VII., VIII., IX., and X.

These several subjects are illustrated by numerous cases, collected with great labor from many different sources. We cannot continue in detail our notice of these subjects without transcending our proper and original limits which we are unwilling to do since the gist of them all is contained in the following *general summary* which must bring this notice to a close.

From the numerous facts and cases adduced in the preceding pages, and from the reasoning founded upon them, the following conclusions may be fairly and legitimately deduced. These conclusions may be arranged under different heads, according to their respective relations, as diagnostic,, pathological, therapeutic and operative.

I. *Diagnostic Signs.*—Under this division of the subject may be briefly mentioned the nature and mode of entrance of foreign bodies, their liability to be arrested in different portions of the air-passages, and the symptoms commonly induced by their presence.

1. Any substance, whatever may be its form, provided it be not disproportionably large, may enter the larynx, and thence descend into the trachea and bronchial tubes.

2. The entrance of the foreign body is usually effected during a strong and sudden inspiration, while the epiglottis is off its guard, the glottis expanded, and the larynx quiescent.

3. The extraneous substance may be arrested in any portion of the air-passages, but not with equal frequency. Thus, in the larynx, it is, perhaps, most liable to be entrapped in the ventricles of Morgagni; and, when it descends into the bronchial tubes, it more frequently selects the right than the left. The trachea, on the contrary, rarely becomes its permanent receptacle; and the same is true in respect to the binary and tertiary divisions of the bronchial tubes.

4. The site of the foreign body is materially influenced, not generally, but frequently, by its size, weight, and configuration. Thus, a shot, ball, pea, bead, or pebble will be more likely to descend into the bronchial tubes than a rough, light, sharp, or angular substance.

5. The intruder may shift its place. Thus, it may pass from one bronchial tube into the other, or from these canals into the trachea, or from the trachea into the larynx, in a direction contrary to that of its entrance. On the other hand, it may be firmly impacted, either in its first situation, or in some secondary one.

6. The immediate and invariable effect of the entrance of a

foreign body into the air-passages is a violent, spasmodic, and irresistible cough, with dyspnœa, and a sense of impending suffocation. The countenance is frequently livid, and the patient sometimes falls down in a state of insensibility.

7. The violence of the first symptoms continues from a few minutes to a quarter of an hour, half an hour, or even longer, when it is succeeded by a calm, variable in duration, and again followed by cough and difficulty of breathing, very much as in the first instance.

8. When the extraneous substance is arrested in the larynx, there will generally be more or less change in the voice, sometimes, indeed, total aphonia, hoarseness, and croupy cough, with diminished respiratory murmur in both lungs. The latter symptom will be most conspicuous when the body is so large as to impede materially the ingress of the air.

9. When the foreign body plays up and down the windpipe, as it often does when it is light and small, it always excites violent coughing and suffocative symptoms, very similar to those produced at the moment of its entrance. Under such circumstances, the patient can frequently feel the extraneous substance as it impinges against the trachea and the larynx. It is not so certain, however, as some have alleged, that the surgeon can hear and feel it by the application of the ear and fingers to the windpipe. Such an occurrence, at all events, must be very unfrequent.

10. A bulky body, relatively considered, may entirely fill the bronchial tube into which it may happen to fall, and thus give rise to complete collapse of the corresponding lung, as occurred in one of my own cases. A thin, flat body, as a coin, may produce the same effect, by acting as a sort of valve. In general, however, more or less air will pass by the side of it, thereby enabling the respiration to go on, although much more feebly than in the normal state. In both cases, the walls of the chest, on percussion, will emit a clear sound. The respiration in the opposite lung, after the first few days, will generally be puerile.

11. The site of the foreign body is occasionally, but not generally, indicated by a fixed pain, soreness, or sense of uneasiness in the larynx, trachea, or bronchial tubes.

12. The expectoration may be simply mucous, or it may be tinged with blood, or mixed with pus, especially in chronic cases, in which there is also occasionally hæmoptysis.

13. In attempting to establish the diagnosis of a foreign body in the air-passages, the practitioner must take into account, first the history of the case; secondly, he must carefully examine the condition of the respiratory organs, considering fully the rational and physical signs; and, thirdly, he must bear in mind the fact that the foreign body is liable to change its situation, thereby inducing corresponding alterations in the symptoms.

II. *Pathological Effects.*—These effects are primary and secondary; the former relating to what takes place immediately after the occurrence of the accident, and the latter to the organic alterations induced in the respiratory apparatus in consequence of the protracted retention of the foreign body.

1. The extraneous substance may destroy life at the moment of its introduction, or death may be induced at a variable period afterwards. In either case, the fatal effect may be produced by spasm of the larynx, or by mere mechanical occlusion.

2. The foreign body may be expelled immediately after its entrance, in a violent paroxysm of coughing, or it may be expelled subsequently either before or after it has induced serious structural lesion in the air-passages.

3. No patient is safe so long as the extraneous substance remains in the windpipe, whether in the laryngeal, tracheal, or bronchial portion, inasmuch as he may perish at any moment from suffocation, or, at a more or less remote period, from inflammation.

4. The danger from suffocation, when the patient escapes from the first effects of the accident, is generally greatest, all other things being equal, when the foreign body plays up and down the windpipe. If impacted, it may lead to the same result by becoming accidentally detached; but in such a case it will be more likely to destroy life through inflammatory action.

5. A foreign substance is occasionally comparatively harmless, as when, for example, it lies in one of the ventricles of the larynx; but, generally, it causes serious structural mischief.

6. The danger of severe and fatal inflammation is greater when the substance is lodged in the bronchial tubes than when it is arrested in the larynx or the trachea.

7. Violent and even destructive disease may be induced in the lungs, bronchial tubes, and pleura when the foreign body is situated in the larynx.

8. The most common structural lesion in cases in which the extraneous substance is retained for any length of time, are inflammation, abscess, and tubercles of the lungs, inflammation of the mucous membrane of the windpipe, and inflammation of the pleura, with effusion of serum and lymph, or sero-purulent matter. In rare instances there is marked alteration in the conformation of the chest, as happened in one of my own patients.

III. *Therapeutic and Operative Considerations.*—Under this head may be mentioned, aphoristically, the use of emetics, sternutatories, and other remedies, as expellents of foreign bodies; the importance of early recourse to bronchotomy, with the manner of performing the operation; and the various circumstances which should regulate the after-treatment.

1. Although foreign bodies have occasionally been ejected from

the windpipe, under the influence of emetics, errhines, and other means, the number of such cases is too small to justify the practitioner, under any circumstances, in confiding in these different classes of remedies. Generally, indeed, their effect is to increase the respiratory suffering and the danger of the patient, by impelling the intruder against the larynx, where its presence always excites spasm and other unpleasant symptoms.

2. The remarks just made in reference to the use of emetics, sternutatories, and other means, are equally applicable to all spontaneous efforts at expulsion, whether they occur in the form of coughing, violent respiratory action, sneezing, vomiting, or dreaming; because, although these efforts are sometimes successful, yet they are more generally unavailing, if not positively hurtful, and even destructive to the patient.

3. Inversion and succession of the body, with or without beating of the chest, are generally hazardous proceedings, unless preceded by an opening in the windpipe; for the reason that the offending substance, if it be forced out of its lurking place into the larynx, or even against this portion of the tube, is inevitably followed by violent coughing and suffocative symptoms; thus greatly endangering the safety of the patient. The only case in which they ought to be practised, is where the foreign body is a shot, bullet, or similar substance.

4. Inasmuch, then, as no confidence is to be placed in the use of emetics, errhines, and other means, inversion and succussion of the body, and not even in nature's own efforts; and inasmuch, moreover, as no patient can be considered as being safe so long as the extraneous substance remains in the air-passages, it follows, as a necessary corollary, that bronchotomy affords the best chance of relief, and that, consequently, it should always be resorted to as early as possible, unless there is some special contraindication; as, for example, serious organic disease of the respiratory organs. The great danger in this accident is spasm of the glottis, which nearly always promptly disappears the moment the artificial opening has been effected.

5. In children, and in young or timid persons, the operation should always be preceded and accompanied by the administration of chloroform, which, while it perfectly calms the patient, greatly facilitates the extrusion of the foreign body, by rendering the respiratory organs tranquil and passive.

6. Laryngotomy is always comparatively easy of execution, and should, therefore, always be selected when there is a positive certainty that the intruder is lodged in the larynx. In all other cases, and also where the patient is very young and the neck very short, tracheotomy, although, in general, a very difficult procedure, should be preferred. Laryngo tracheotomy is rarely necessary or proper, except in cases where the ordinary operations are found to be inadequate.

7. The windpipe, as a general rule, should never be opened before there is a cessation of hemorrhage, lest the blood, by falling into the tube, should embarrass the operator, if not seriously compromise the safety of the patient.

8. The opening, both in laryngotomy and in tracheotomy, but especially the latter, is generally too small to admit of the ready escape of the offending substance. To answer the purpose effectually, and this is one of the great objects of the operation, it should be at least one inch and a quarter in the adult, and not less than one inch in the child.

9. There is no necessity, in any case, for the removal of an elliptical portion of the trachea, inasmuch as the retraction of the edges of the wound by means of hooks will generally afford ample space for the ejection of the foreign body and the introduction of instruments. In laryngotomy, a crucial incision may sometimes be advantageously made into the crico-thyroid membrane.

10. Under no circumstances should bronchotomy be performed without a thorough exploration of the chest and œsophagus. It should be remembered that mere spasm of the glottis, caused by the lodgement of a foreign body in the fauces or gullet, or by derangement of the digestive, respiratory, and nervous functions, may induce a train of phenomena, closely resembling those occasioned by the presence of a foreign body in the air-tubes.

11. Bronchotomy is generally inadmissible when there is serious organic disease of the lungs, attended with marasmus and all the ordinary symptoms of pulmonary phthisis.

12. The foreign body, both in laryngotomy and tracheotomy, may escape either at the artificial opening, or by the glottis. In either case, it may be thrown to a considerable distance, perhaps the very moment the tube is pierced; or it may be intercepted by the edges of the wound; or it may, if it take the natural route, lodge in the mouth, or pass into the stomach.

13. Should the foreign substance not be ejected, or appear at the artificial orifice within a few minutes after the tube has been pierced, search should be made for it with the forceps, or hook, with a view to its extraction; but all such attempts should be made in the most gentle manner, nor should they be prolonged beyond a few seconds at a time; inasmuch as they almost invariably excite violent coughing and suffocative feelings. The use of chloroform will greatly facilitate this step of the procedure.

14. A much better plan than searching for the foreign substance, at least in the first instance, is to invert the patient's body, and to strike the chest with the hand, or with a pillow. This procedure should be tried in all cases of balls, shot, peas, beans, water-melon seeds, plum-stones, cherry-stones, button-moulds, and other similar articles. Inversion of the body, with previous opening of the tube, is a comparatively safe operation. Succussion and percussion are important auxiliaries in such a case.

15. When the extraneous body refuses to escape, or resists our efforts at removal, the edges of the tracheal wound should be kept apart by means of blunt hooks, in order to favor extrusion. The outer wound should be covered, in this case, with a piece of gauze, arranged in the form of a bag, to prevent the ingress of flies and dirt.

16. Riddance having been effected, the wound is closed with adhesive strips, aided, if necessary, by a few interrupted sutures, care being taken not to carry them through the substance of the trachea. Simple water-dressing is the best application, but even this may, in general, be dispensed with.

17. The after-treatment must be strictly antiphlogistic; the respiratory organs must be diligently watched; and the air of the patient's apartment must be maintained, throughout, at a uniform temperature, that is, at from 65° to 68° of Fahrenheit. It should be remembered that no patient is safe, or out of danger, after this accident, so long as there is inflammation of the respiratory organs, whether the intruder has been expelled or not.

18. Finally, it may be necessary to perform bronchotomy a second or even a third time. The same circumstances which induce us to perform it once may compel us to perform it again, at a more or less remote period, upon the same individual.

The work contains numerous illustrations which are rather well executed and add somewhat to its general interest. For sale in this city by Maxwell & Co.

Record of Medical Science.

Chronic Heart Disease. By Alexander Harvey, Physician to the Aberdeen Royal Infirmary, &c.—In the following notes, an attempt is made to exhibit, within as small a compass as possible and in a form approaching the tabular, the leading facts connected with the pathology, diagnosis, and prognosis, of the more common organic affections of the heart. Imperfect as the notes are, the author is not without hope that they may be of service to some of his colleagues in the Association, who, though familiar with the subject of heart-disease, may not always be able at once or readily to call to mind such particulars respecting it as they must often have occasion for in the course of their practice, and which they may not always have time or opportunity to collect from large treatises.

It may be added, that the notes were originally drawn up for the students attending the author's class, and delivered to them as a recapitulation of the facts just previously detailed at greater length in the lectures; and that the materials of them are chiefly taken from Dr. Watson's Lectures and Dr. Allison's Outlines of Pathology and Practice of Medicine, the worgs used in the class as text-books.

Diseases of Valves and Orifices.

I. The valves and orifices of the left side of the heart are at least twenty times more liable to disease than the valves and orifices of the right side.

Disease of the semilunar pulmonary valves is so rare as to be matter of pathological interest merely. Disease of the tricuspid valves is more frequently, although still seldom, met with; and still seldomer without co-existing disease of either the aortic or mitral valves.

II. In early life, and in women, the mitral valve and corresponding auriculo-ventricular orifice are oftenest diseased; in advanced life, and in men, the aortic. In many cases, at all ages and in both sexes, the two sets of valves and openings are simultaneously diseases.

III. The diseased states of the valves and orifices are mostly the result of antecedent endocarditis of rheumatic origin, and consist of concretions forming on the valves; or mere perversion of

nutrition, independent of inflammation, and occurring in connexion with atheromatous and other kinds of deposit in the aorta and arteries generally.

IV. The effects of these changes on the functions of the valves and orifices are two-fold:—

1. By contracting and narrowing the orifice, to impede or obstruct the passage of the blood (*valvular obstruction, obstructive disease of valves*).

2. By thickening, corrugating, and shortening the valves, to make the orifice more or less permanently patent, and allow regurgitation or reflux of blood (*valvular insufficiency, valvular patency, regurgitant disease of valves*).

V. Valvular obstruction and valvular insufficiency often exist separately, but are oftener co-existent in the same valve. Each of them may obtain in very different degrees, and the two may be very variously combined.

VI. In a very few cases, the cause of patency is preternatural widening of the orifice without disease, but with no adequate extension by growth, or the valves; and, in a few others, it is owing to disease with shortening of the chordæ tendineæ, the valves themselves being sound.

Diseases of Walls and Cavities.

I. Hypertrophy and dilatation may be either partial or general, oftenest partial. Dilatation, unaccompanied by hypertrophy, is rare.

II. Hypertrophy and dilatation are very generally *secondary* morbid states. They may be produced by various causes:—

1. In a very few cases, by unknown causes, or causes unconnected with obvious change of structure elsewhere (*primary*).

2. By adhesion of the pericardium to the heart, consequent on plastic exudation from pericarditis.

3. By preternatural widening, with or without change of structure, of the ascending aorta.

4. By diseased states of the valves. This is the most common cause.

III. The *rationale* of their production may be thus stated:—

1. Disease of the valves, widening of the aorta, adhesion of the pericardium, create a demand for increased action of the heart; and this increased action, in a constitution otherwide healthy, leads to increased nutrition of the organ. The walls of the heart are thereby gradually increased in bulk and in contractile power (*simple hypertrophy*).

2. When, along with this increased action, there is a full quantity of blood in the body, the cavities of the heart are gradually dilated at the same time that their walls are thickened (*hypertro-*

phy with dilatation, eccentric hypertrophy). But when the quantity of circulating blood is much diminished, the tonic contraction of the thickened fibres of the heart, which are no longer distended, leads to a diminution in the size of its cavities (*concentric hypertrophy*). This is rarely met with, except either as a congenital affection, or, in connection with the *rigor mortis*, as a temporary *post mortem* condition.

3. Dilatation without hypertrophy, consequent on obstructive disease of the valves, occurs chiefly in a weakly habit of body, when the excitement of the heart by the preternatural amount of its stimulus is feeble; but it may be produced, in a habit otherwise healthy, by mere morbid debility of the muscular fibres of the heart, as after some cases of rheumatism affecting them.

IV. In the great majority of cases it is the left ventricle that is the first and chiefly affected, and hypertrophy and dilatation combined (eccentric hypertrophy) that obtains, and in connexion with pre-existing mitral or aortic disease. With mitral disease, there is commonly rounding of the apex, and often simple hypertrophy merely; with aortic disease, there is elongation of the apex, and commonly eccentric hypertrophy.

Pure dilatation may affect either ventricle, oftenest, perhaps, the right, and that chiefly in females, and in such cases seems to occur in connection rather with disease of lung (*e. g.* habitual asthma) than with diseased valves.

Diagnosis of Chronic Heart Disease.

Diagnosis of Disease of Valves and Orifices.—Practically, in at least nineteen out of twenty cases, the questions to be determined are whether it be the mitral or aortic valve that is diseased or both; and whether the disease be of the nature of valvular obstruction, or of valvular insufficiency, or both. The diagnosis is mainly founded on these two things:—

1. A bruit or murmur heard, called, from its blowing character, *bellows murmur*, or, from its seat being within the heart, *endocardial* murmur.

2. The state and character of the pulse at the wrist.

I. *Bruit or murmur.* Its import varies according to the time when it is heard, the place where it is best heard, and the direction in which it is conveyed furthest. The second and third may be taken together, and included under one head.

The time when it is heard.—This may be either with (or rather in place of) the first natural sound (systolic bruit); blood then passing from the left ventricle into either the aorta before, or the auricle behind; or with the second natural sound (diastolic bruit); blood then passing into the ventricle, from either the aorta before, or the auricle behind.

The place and direction in which it is best heard and conveyed furthest.—This may be either over the base of the heart, and thence upwards along the aorta and carotids, or at and in the direction of the apex. Accordingly—

1. Bruit, systolic and loudest at base, indicates obstructive disease of the aortic valves or orifice.

2. Bruit, systolic and loudest at apex, indicates mitral insufficiency (patency) with regurgitation.

3. Bruit, diastolic and loudest at base, indicates aortic insufficience with regurgitation.

4. Bruit, diastolic and loudest at apex, indicates mitral obstruction. Rarely if ever heard.

*** Various combinations of these murmurs are sometimes heard, constituting double bruits. Their import is to be gathered from that of the single murmurs. Thus, *e. g.* there may be a systolic burit, equally loud at the base and at the apex, indicating at once aortic obstruction and mitral insufficiency; or there may be a systolic and a diastolic bruit, both loudest at the base, and indicating aortic obstruction and aortic regurgitation.

II. *The Pulse.*

1. Pulse at wrist irregular, intermittent, unequal and soft, small, or weak, indicates mitral disease, obstructive or regurgitant, particularly the latter, on which this condition of the pulse is specially dependent.

2. Pulse regular, full, or hard, indicates aortic disease; if jerking and resilient, aortic insufficiency (with hypertrophy).

The foregoing (I. and II.) may be thus briefly represented on a card carried in the pocket.

Bruit: If *systolic* and loudest at
Base=Aortic obstruction.
Apex=Mitral insufficiency.

Bruit: If *diastolic* and loudest at
Base=Aortic insufficiency.
Apex=Mitral obstruction.

And on the reverse side of the card:—

Pulse: If *regular*,
Full, or strong,
Jerking, resilient,
} Aortic disease.

Pulse: If *irregular*,
Intermittent, unequal,
Soft, small, weak.
} Mitral disease.

Diagnosis of Disease of Walls and Cavities.

I. Of Hypertrophy.

1. The action of the heart preternaturally, sometimes exces-

sively strong, with corresponding impulse felt on laying the hand or the ear over the præcordial region.

2. The sounds of the heart's action, and especially the first sound, less audible than natural,—obscured and muffled.

II. Of Dilatation.

1. The action of the heart weak, somewhat undulatory, with indistinct impulse.

2. The sounds of the heart's action, and especially the first, preternaturally clear, short, or abrupt.

III. Of Hypertrophy and Dilatation.

With various modifications, as the one or the other condition predominates, of the abnormal impulse, and the abnormal sounds of the heart's action.

1. The area of the natural dulness on percussion increased, often with squareness of outline of this area

2. The apex of the heart seen and felt to beat lower down than natural, often as low as the seventh or eighth ribs.

3. The præcordial region in some cases obviously bulging and prominent.

Progress and Results of Chronic Heart Disease. Prognosis.

I. It is important to discriminate between the affection of the heart itself, and the secondary affections,—*i. e.* affections of other parts and organs resulting form it.

As time advances, there occurs a gradual aggravation of the heart affection; an increase of the valvular obstruction or of the valvular insufficiency, or of both; and likewise an increase of the hypertrophy or of the dilitation, or of both.

Sooner or later secondary affections, of various kinds, extrinsic to the heart, supervene, *e. g.*

1. Dyspnœa; bronchitis; pneumonia; pulmonary hemorrhage, with or without pulmonary apoplexy.

2. Enlargement of the liver, or of the liver and spleen; hæmatemesis.

3. Cephalalgia; tinnitus; vertigo; syncope; epilepsy; epitaxis; cerebral hemorrhage; apoplexy; palsy.

4. Dropsical effusion; œdema of face, or of face and hands,—of lungs; hydrothorax; ascites; anasarca or general dropsy.

5. Various combinations and successions of the foregoing.

II. Both the aggravation of the heart disease and the supervention of some secondary affection take place more surely and more quickly, in young and full-blooded individuals, than in those already old, or thin or emaciated.

III. As to the relation that obtains between the secondary affections and the diseased heart:—

1. The connecting link between them is the altered (abnormal)

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III. As to the relation that obtains between the secondary affections and the diseased heart:—

1. The connecting link between them is the altered (abnormal)

condition of the general circulation produced by the state of the heart. This condition may be one or other, or a combination of threek inds: impeded venous current behind (pulmonic and systemic), as in mitral disease, whether obstructive or regurgitant; or undue impulsion of the arterial current in advance, as in hypertrophy; or too feeble impulsion, as in purely passive dilatation of of the ventricle.

2. Nevertheless the diseased state of the heart and these effects of it on the general circulation are commonly only *permanent predisposing* causes, not the direct or exciting causes, of those secondary affections,—the immediate causes of them (often in a great measure *avoidable*) being intemperance, over exertion and fatigue, mental emotion, and especially exposure to cold or cold and wet.

3. Some of the secondary affections are themselves the occasion, or concurrent and co operating causes, of certain other secondary affections, *e. g.* bronchitis—of œdema of the lungs, or of general dropsy; enlargement of the liver, or of the liver and spleen—of ascites, hæmatemesis, epitaxis, apoplexy; or consolidation of lung and enlargement of the liver combined, with bronchitis—of general dropsy.

IV. The worst kind of heart affection is that in which there is at once obstructive and regurgitant disease of the mitral valve, because the most effectual in deranging the general circulation, and the most fruitful therefore of secondary affections. The least unfavorable is a diseased state of the aortic valve only, with moderate hypertrophy of the left venticle; the hypertrophy, though reckoned a diseased state, being, in fact, a provision of nature for overcoming the resistance offered to the exit of the blood.

Insufficiency of the mitral valve, however, with much hypertrophy of the left ventricle, is very hazardous; the hypertrophy in this case enhancing the evil naturally attendant on the patency of the valve.

V. When death ensues, the fatal event may take place suddenly, in the way of syncope, and be directly referrible to the diseased state of the heart; or it may take place more gradually through the medium of some secondary affection, and in very various modes,—in the way of asthenia, or in the way of coma, or in the way of asphyxia,—according to circumstances.

VI. The prognosis in any case must mainly be based upon, and may in general readily be determined from,—

1. The kind and extent of heart affection.

2. The tendency that may appear towards secondary affection; and the kind and extent of this.

3. The age and bodily habit of the patient.

4. The degree to which the habits and circumstances of the patient can be controlled and regulated, and the probable efficacy of the remedies applied, with the view in respect of them all of

retarding the progress of the heart affection,—of warding off secondary affections,—and of removing those when they supervene; these several objects furnishing at the same time the main indications of treatment.—*Association Medical Journal.*

Propositions in Regard to Cancroid. By Paul Broca.—

1. Cancroid is an homœomorphous tumour constituted by the elements of epithelium.

2. Cancroid tumours are distinguished from cancers by two series of characteristics; those, namely, which are determined by the naked eye, and those which are revealed by the microscope. The lesions of these two diseases are different, pathological anatomy consequently compels us to separate them.

3. The local development of cancroid presents many analogies with that of cancer, but we observe differences in the manifestations of the two diseases, differences which consider individually are perhaps insufficient to distinguish them, but which taken together form a group of characteristics as precise as any purely clinical characteristics can possibly be.

4. Cancroid is very often developed under the influence of purely local causes, such as slight but frequently repeated irritations; many surgeons deny the influence of local causes on the development of cancer, and it is certain that if it is ever affected by causes of this sort, it is only in exceptional cases.

5. Cancer is developed under the influence of a general diathesic cause. It is not so with cancroid. It is true, that in very rare cases, two or more cancroids may appear simultaneously or successively in the same individual. Their presence on several distinct portions of the cutaneous system is an evidence of the existence of a sort of diathesis in this system, just such as we observe when successive crops of warts are thrown out on the skin, just such as exists in many other purely local diseases. But no one can confound these local diatheses, limited to a single organic system, with the general diatheses, among which the cause of cancer is included.

6. Hereditary predisposition, which is often the cause of cancer, has not been hitherto found to have any connection with the production of cancroid. Undoubtedly, it is not impossible that two individuals of the same family should both suffer from cancroid tumours; the calculus of probabilities indicates that this should occasionally occur; but these cases are as yet hypothetical, whereas the influence of hereditary predisposition in cancer is based on numerous and precise facts, not to be explained away as simple coincidences.

7. Cancroid only appears on parts covered by epithelium.

Cancer, on the contrary, may commence anywhere that there are vessels.

8. Many organs in which cancer rarely appears, are often the seat of cancroid. Many organs in which cancer is common are never the seat of cancroid.

9. True cancer of the skin is very uncommon. The majority of the suspicious affections of the skin formerly designated cancer of the lip, breast, prepuce, &c., are nothing but cancroids.

10. The progress of cancroid is usually much slower than that of cancer. The duration of life when no operation is performed is much longer in cancroid than in cancer; longer in the proportion of 10 to 1 almost.

11. Cancer ordinarily commences by a circumscribed tumour; cancroid usually appears first as a button or pimple with a large base, as a wart, or as a papillary hypertrophy; or else as an excavated, scarcely indurated surface, covered for a long time by successive crusts, before it becomes the seat of a true ulceration.

12. These characteristics are so marked, that clinical observers have always been struck by them, and have thought it proper to bestow a particular name on the tumours which we now call cancroids.

13. Cancerous ulcers give rise to much more frequent and abundant hæmorrhages than are produced by the ulcers of cancroid.

14. Cancer invades the glands more uniformly and more rapidly than cancroid.

15. Cancer and cancroid, when let alone, usually terminate in death; but in the case of cancroid death is the result either of the seat of the tumour, as in cancroid of the larynx, of exhausting suppuration, or of putrid absorption, there is nothing special in it. In cancer, death may arise from these same causes; but sooner or later there is produced besides a specific morbid condition, the cancerous cachexy, or infection.

16. Both cancer and cancroid may relapse after extirpation, but an examination of these relapses points out new differences in these affections.

17. It is demonstrated that relapse is infinitely more common in cancer than in cancroid. This truth has been recognized and proclaimed in every age, long, long before the introduction of the microscope in pathological enquiries.

18. It is certain that a great number of cancroids are cured by the knife; it is doubtful whether true cancer has ever been cured.

19. Cancroids only relapse near the site of their first appearance (par continuation) that is to say within the sphere of local action of the primary tumour. They appear either immediately on the

site of the preceding tumour, in its vicinity, or on neighboring glands, and this only exceptionally. Cancer often reappears in the same manner, but it also buds forth very frequently in distant parts of the organism.

20. In about every other case of cancer, we find, at the autopsy, cancerous infiltration in the internal organs; nothing of the sort is observed after death from cancroid. More than fifty examinations have been made in France of bodies of persons dying with cancroid, and in not one have multiple cancroids been detected; the unique exception quoted by Mr. Paget, even admitting it to be incontestable, by its extreme rarity, contrasts in the most striking manner with the extreme frequency of cancerous infection.

21. Cancroid is a tumour, cancer is a disease; the first is the result of a local affection of the cutaneous system, the second is due to a general affection of the economy.

22. The distinction between cancroid and cancer has been suspected, hinted at, and even treated of by numerous surgeons of the past century. Pathological anatomy only confirms and renders incontestable a distinction recognized by pathology proper.—*Mémoires de l'Académie de Médecine.* Tome XVI.

On the Transmissibility of Syphilis. By M. Cullerier.—The above author has come to the conclusion that syphilis is not transmissible from the father, but is only manifested in the fœtus when the mother has been infected. If we examine rigorously the case in which the father is supposed to have been the sole cause of hereditary syphilis, we shall find that, at the period of conception, he has transferred the contagion to the mother, who has then directly infected her offspring. Among other illustrative cases M. Cullerier cites the following: A man affected with secondary syphilis married before he was completely cured, his wife immediately became pregnant, and the child which she bore is now eight years old, and the elder brother of two other children, which are in the enjoyment of as vigorous health as itself. In another case, conception occurred simultaneously with the development of secondary syphilis in the father; yet the child which was born is now six years old, and has always enjoyed the most robust health.

M. Vidal has related a case in which a healthy woman, on being united to a man having secondary syphilis, bore a child which immediately died of syphilis. Four years thereafter she married a healthy man, but the child of which he was the father was also syphilitic. Hence Vidal concludes that the semen makes a specific impression on the ovaries, which not only exerts an influence on the products of the primary conception, but also on those of every

succeeding one. Cullerier remarks, first of all, that Vidal was able to adduce no proof that the woman, in the case he cited, was free from syphilis. Vidal has adduced instances (similar to those given in Dr. Harvey's excellent papers in *The Monthly Journal*, x. xi.), in which the first conception in animals influenced the product of subsequent intercourse. But these Cullerier does not consider of much importance as being *physiological*, not *pathological* facts. In fine, he considers that the hereditary nature of syphilis is incontestable, but that it is always due to maternal and never to paternal influence. The development of disease in the infant may occur at all periods of fœtal life, and at all periods of maternal infection, either during the existence of an infectious chancre, during the presence of secondary or tertiary symptoms, during the interval of these constitutional manifestations, or even when the mother appears in most perfect health. Hereditary syphilis generally manifests itself *during the first year of life*, and Cullerier avers that when the infant of infected parents has passed this period, it may be considered to be exempt from the disease. Many authors have maintained an opposite opinion, and believed in the manifestation of hereditary syphilis late in life. This is merely a convenient doctrine, says our author, devised to shield the compromised morality of certain persons. Thus an old author, Jacques de Béthencourt, who wrote in 1527, said that when he met with syphilis among monks and nuns, he always had the charity to believe that it was due to hereditary transmission!—*Archiv. Gen. de Med.*

The Revue Medicale and the Debate on Cancer.—"Let us turn a critical eye," M. Sales Girons, (disciple of M. Cayol, and editor of the organ of the Vitalists) "on that famous debate in which the School of Paris, in formal session at the Academy of Medicine, is demolishing that great edifice which cost it forty years of labor. Anatomism, like Saturn and the Revolution is at last devouring its own children.

Ninety-nine in a hundred of those who read the narrative of the present academic war, will see in it a simple scientific discussion, rather bitter it is true, about tumours in general, and the incurability of cancer in particular.

But the subject of tumours is only the pretext, the incurability of cancer only the outside noise of the conflict. The eternal truths of medicine are in question, and the fathers of the Anatomical School, represented by M. Velpeau, are vainly attempting to arrest the torrent which they themselves set in motion, not foreseeing whither it would lead.

When we look beneath the surface of the debate which agitates

the Academy, we find the *Microscope* and the *Clinic* in mortal combat.

The microscope, an amplification of the much-vaunted scalpel, represents *matter.*

The clinic, scoffed at and disdained by the anatomo-pathologist, represents observation, *œoup d'eil*, experience, and medical tact and genius.

The microscope is the despotic instrument; the clinic is the intelligence which reasons.

The microscope is the *fact*, the clinic is the *science.*

The microscope is —— is the utter negation of medicine; the clinic is its supreme affirmation.

And yet the microscope is the very culmination, *le derniere mot* of anatomism; judge, then, anatomism. We are constantly asked to demonstrate the practical utility of sound doctrine; wait a while and look at the natural consequences of a vicious system.

Practitioners who have grown grey by the bed-side, physicians and surgeons who have earned a right to form a diagnosis, what are you thinking of? Of cancer —Why, send a piece of the tumour to a micrographer in vogue, and by return mail you will have a ready made diagnostic, and the best prognosis the market affords.

But cancer is only the beginning; soon we shall be required to obtain the micrographer's assent to our diagnosis of phthisis; unless the sputa he inspects contains tuberculous matter our observations will be valueless; and then his domain will be extended to all morbid alterations, all normal and abnormal secretions, until medicine becomes the tributary of the microscope, the physician the servant of the micrographer.

The anatomo-pathologists decreed that matter should teach mind, that fact should predominate over science, that the senses should control the perception; here is the last step of the system,—the instrument has replaced the understanding! *patere legem quam fecisti.*

This is the true meaning of the final scene which is now being enacted at the Academy of Medicine. I say *final*, because the old or scalpel anatomists, and the young or microscope anatomists are engaged in mutual annihilation. We see the fathers struggling to avoid the abyss which they dug themselves to lay the foundations of their system, and we hear their cries.

The clinic, they exclaim through the mouth of M. Velpeau, leave us the clinic, which after all will answer for medicine and the physician. When I patronized the microscope twenty years ago, adds M. Velpeau in his own name, I was far from suspecting the pretensions which it would set up; I renounce the microscope, its pomps and vanities!

—— But admit, interrupts the microscope, that I possess the cancer cell, and consequently the diagnosis of cancer?

—— I will not admit that even, I will rather deny it, replies M. Velpeau.

—— And M. Velpeau is right; he knows the story of that child with innate diplomacy who refused to say A because he knew that afterwards he would be made to say B, and then the whole alphabet.

—— Grant us at least, resumes the microscope, the incurability of cancer?

—— Not I, says M. Velpeau, cancer is curable, I have my hand full of examples to prove it.

—— But you teach, the devil take it, urges the microscope, the pathological localization of cancer?

—— Heaven preserve me from such a doctrine, responds M. Velpeau; cancer is a diathesis, a dyscrasy, a cachexy; cancer is in the blood before it is in the breast. Cancer, interrupts M. Jules Cloquet in his place, Antoine Dubois was right about it, it is in the nervous system! (*Loud and prolonged applause from the fathers of Anatomism.*)

—— But this is the ruin of your system, cries the microscope, you are in flagrant contradiction with the principles of the celebrated school which admires you as one of its most illustrious representatives.

—— That is possible, rejoins M. Velpeau, the contradiction is my affair; I would do yet more in order to have nothing in common with you, who would destroy medicine with your radicalism. If the microscope is the termination of Anatomism, let it go, let it have its last judgment. *Solvet sæculum in favilla!*

With the aid of this little commentary, the reader will discover the true meaning of the antagonism in this academic debate. On the one hand he will perceive the microscope, respectfully aggressive; on the other clinical medicine, defended by an army of veterans, courageous rather than consistent. The micrographers are striving to maintain: 1st, the monopoly of diagnosis; 2d, the incurability of cancer; 3d, the localization of the cancerous tumour, an anatomical triad, which is a triple negation of medicine. The founders of anatomism are denying anatomical diagnosis, incurability and localization, and defending clinical observation.

And we may predict the result of the battle; the microphiles will be beaten; anatomism will be demolished, and true medicine, re-established on the ruins of a half century, will point to the conversion of M. Velpeau with more pride than to the ninety-and-nine faithful, who have adhered to her throughout the era of systems.

And will the microscope be lost? Certainly not; but clinical

medicine will assign it its true place, making it subservient to order and truth; under the reign of anatomism, it could only be an instrument of anarchy."—*Med. Rev.*

The Treatment of Phthisis by Iodine Inhalations. By M. Piorry.—We take the following extracts from a paper read before the Académie de Médecine. M. Piorry writes:—

I was induced to employ iodine and the vapors of iodine in the curative treatment of pulmonary phthisis by the following circumstances. It was known that iodide of potassium possessed a real and even prompt efficacy in chronic ostitis and periostitis, in scrofulous glandular enlargements, and in many other affections more or less allied with tuberculosis; M. Deyne, an interne of my service, and I, concluded that this remedy would be useful in phthisis (pneumophymie). The results of our experiments were very satisfactory. A striking amelioration took place in many of our patients, and this amelioration was real, for of the patients mentioned in my work on Practical Medicine, three or four are still living, and in the enjoyment of good health.

After the successful treatment of hydrocele and tuberculous diseases of the testicle by iodine injections, it was natural to attempt to obtain similar results in pulmonary excavations. It would have been difficult, if not impossible, at all events it would have been extremely rash to have injected tincture of iodine into the air passages. We therefore bethought ourselves of the vapour of iodine.

In hospital practice it was necessary to select the simplest methods of inhaling iodine. One or two scruples of iodine were accordingly placed in a wide-mouthed jar of the capacity of a quart; the vapour of it was disengaged spontaneously with more or less rapidity according to the degree of heat and moisture of the atmosphere.

When we used the tincture of iodine, we poured from one to three ounces in the jar, and heated it until the vapors of alcohol and iodine were liberated.

The patients breathed the air contained in these recipients, and charged with alcoholic and iodine vapor. One inspiration at a time is sufficient, but it should be deep, as when a sigh is heaved. Such an inspiration produces little irritation of the air-passages; it should be repeated one or two hundred times every day, at intervals; for several successive inspirations produce pain in the larynx and bronchi, and cough.

Even during sleep the patient should inhale iodine. For this purpose several saucers, each containing one scruple of iodine, should be placed about the pillow. At the hospital, we attach

numerous phials of iodine to the iron frame which supports the bed-curtains. The air thus becomes saturated with iodine; the starched curtains are colored blue, and the iron of the bedsteads assumes different tints under the action of the iodine.

If a moist starched paper is interposed between the jar containing iodine and the patient's mouth as he takes an inspiration, it turns blue; if the same air, after traversing the lungs, is breathed upon the paper, it causes no change. The inference from this fact which I have observed very frequently, is that the iodine which entered the lungs is absorbed there, during the brief sojourn of the air in the air-vesicles.

The majority of the patients subjected to this treatment at *La Pitié*, *La Charité*, and in my private practice, took also from twenty to sixty grains of iodide of potassium daily. In all those cases in which the extent of the lesions rendered it probable that adhesions, or that remarkable supplementary circulation so well described by Natalis Guillot, existed between the pulmonary and costal surfaces, we had recourse to frictions with tincture of iodine diluted with 19 parts of water. The patients were placed, in some cases, under other modes of treatment: 1. Under the use of tartar emetic in small doses, the fifth of a grain, for example. This heroic remedy was employed chiefly in those cases in which mucous, puriform, or purulent liquids accumulated in the bronchi, and produced a tendency to asphyxia or hypoxæmia. 2. Under the use of astringents, when the state of the intestinal canal required it; alum, opiates, phosphate of lime, subnitrate of bismuth, &c., were employed with this object, but their use was discontinued as soon as the diarrhœa was suppressed. 3. Under the use of quinia; in large doses when the spleen was congested; in small doses when there was simply a nightly exacerbation of fever depending upon the entrance of pus or softened tuberculous matter into the circulation. 4. Upon a nutritious and reparative diet; a very important point, for surely, if I was called upon to choose between hygienic precautions and the whole category of remedies besides iodine, I should give the preference to a good regimen. 5. Belladonna, opium, and other narcotics were employed, though rarely, to moderate the cough.

The cases which I have treated have not required the use of setons, issues, permanent blisters, or moxas, and I have not been able to comprehend the utility of these artificial pyogenic lesions in a disease in which the formation of pus is a disastrous accident.

Almost all of the patients remained in Paris. They were not sent to Nice, or Pisa, or other parts of Italy, a country where phthisical patients, coming from the north, in spite of all that has been said, recover no faster and no better than elsewhere.

Thirty-one patients have been subjected to the treatment thus

described during the past two years. They all presented, in different degrees, the symptoms commonly attributed to pulmonary phthisis; that is, cough with puriform expectoration, hectic fever, emaciation; the majority of them suffered from diarrhœa, connected probably with tuberculous ulcerations; in many the larynx appeared to be involved in tuberculous disease; the majority had spit blood.

All of these subjects presented marked dulness at the summit of the lungs, either under the clavicle or at the superior scapular region. In most cases there was a hardness at these points, perceptible to the finger. Ordinarily it was possible to define the diseased structure accurately, and to distinguish the parts in which there was great condensation from those which had undergone less alterations of structure. In some cases a *bruit hydrærique* could be heard.

In every case the stethoscopic signs were as positive as those revealed by plessimetry. At the points at which dulness and resistance had been noted, the ear recognized rude or tubal respiration, and more or less resonance of voice. In many cases large cavities were indicated by loud gurgling, cavernous respiration, and pectoriloquy. Each patient expectorated round, opaque, nummular sputa, the amount of which corresponded with the extent of the disease as determined by other methods of exploration.

I desired to appreciate the effects of iodine with precision, and therefore I did not trust to the indications of plessimetry. I ordered charts, on which were described exact delineations of the diseased parts, and representations of the variations in sound upon percussion which occurred from day to day. In casting the eye over these figures, it will be seen that after four, six, or twenty days, six weeks, or three or four months of the iodine treatment, there was in almost every case a diminution in the extent of the surface over which there was at first feebleness of respiration, dulness, resistance, &c.; that, at the same time, the stethoscopic signs indicated an amelioration in the condition of the condensed portions of lung. This result did not occur only in those patients who were slightly diseased, but in almost every case. Numerous patients with cavities in the lungs were apparently cured. The ultimate results were as follows: Decided amelioration in the symptoms and anatomical characters in 20 patients. Disappearance of the anatomical characters and of most of the symptoms in 7 cases. Death, with or without amelioration, in 4 cases.

After some reflections upon the possible manner by which iodine operated in the cure of phthisis, M. Piorry concludes with the following propositions:—

"1. The inhalation of the vapor and tincture of iodine is useful in the cure of phthisis.

"2. In many cases such inhalation is followed by a diminution

in the extent of the indurated parts surrounding tuberculous deposits, and an amelioration in the general symptoms.

"3. It is probable that tubercle itself disappears under the influence of iodine inhalations.

"4. That inhalations of the tincture of iodine may promote the cure of tuberculous cavities.

"5. That after the softening of tubercles, the resulting cavities may cicatrize spontaneously.

"6. That compression of the thorax over the points of disease indicated by percussion and auscultation, may contribute to the cure of the local lesion, and to the prevention of pyæmia.

"7. That iodide of potassium administered internally, and frictions with diluted tincture of iodine over adherent portions of the lung, are also of great utility.

"If," adds M. Piorry, "any useful therapeutical facts have been brought out in the preceding essay, I would observe that science and humanity are indebted for them to the progress of accurate diagnosis."—*Record of Medical Sciences.*

The Functions of the Pneumogastric Nerves. By Dr. Sequard.—I wish to take date of the discovery of two important facts relative to the physiology of the pneumogastric nerves.

I had already found and published that these nerves are the motor nerves of the vessels of the heart; I have since found that they are also the principal (if not the only) motor nerves of the small vessels of the lungs. This view is grounded on the following facts:

1st. The section of the pneumogastric nerves, in the cervical region, is followed by the dilatation (or paralysis) of the small vessels of the lungs, as well as it is by the dilatation of the vessels of the heart.

2d. The galvanisation of these nerves in the cervical region, after they have been carefully separated from the sympathetic, produces the contraction of the vessels of the lungs, as well as that of the vessels of the heart.

I will prove elsewhere that the dilatation of both the vessels of the lungs and those of the heart, which follows the section of the pneumogastric nerves, is the first and principal cause of the death which is the constant result of this operation.

On the Collodion Treatment of Orchitis. By M. Ricord.—M. Ricord tried the collodion treatment, as proposed by Bonnafont, in thirty-eight cases of blenorrhagic epididymitis; and the following are the conclusions at which he has arrived:—

1st, Elastic collodian causes less suffering than ordinary collodian, but more than the other modes of treatment.

2d, It is not so efficacious a therapeutical agent as was imagined.

3d, It does not allay the pain, nor effect a cure more promptly than other modes of treatment.

4th, Its action is principally manifested on engorgement of the subscrotal cellular tissue, and on inflammation of the scrotum itself.

5th, It is only a feeble mode of exerting compression.

6th, If collodion only acts through the medium of the cold resulting from the evaporation of the ether, the application of simple ether, or of cold to the scrotum, would answer equally well.

7th, It is not rational to believe that collodion can cure orchitis and epididymitis, simply by protecting the diseased parts from the action of the air.—*L'Union Medicale.*

Physic and Music.—Every one knows that Esculapius was the son of Apollo, and this relationship accounts for the frequency with which we find good physicians to be good musicians also. Our annals are rich in distinguished doctors, who have had excellent voices, or who played with skill on various instruments. Boerhaave was a capital performer on the flute; and it is a curious coincidence that the late great texicologist of France, and the eminent living texicologist of Great Britain, should have both possessed splendid bass voices. The editor of the *Union Medicale* comments on the number of musical confreres he meets with in the saloons of Paris (Janvier 14); and we can assure him that in Edinburgh the same thing is observable. Indeed, most of our public professional dinners and entertainments would now be considered dull affairs, without the songs and glees with which they are enlivened by the Medical Glee Club of this city.—*Ed. Med. Journal.*

"An Electrotype.—The Patterson (N. J.) Intelligencer gives a curious incident of the late thunder storm.

"A little girl was standing at a window before which was a young maple tree. After a brilliant flash of lightning, a complete image of the tree was found imprinted on her body. This is not the first instance of the kind, but it is a singular phenomenon."—*Public Ledger.*

[Dr. Robert Johns, of Dublin, on Syphilis as a cause of Abortion and Premature Labor, after referring to several cases, draws the following deductions:]

1. That secondary syphilis is not curable in the pregnant female.
2. That mercury is the only certain means of preventing the abortions and premature labors depending on syphilis.
3. That both parents must be submitted to this treatment.
4. That as the disease in such cases exists in the secondary form, the system must be kept under the influence of the metal for at least six weeks, and in some cases even longer.
5. That syphilis is communicable to the female through the semen of the male, without the presence of any ulcer or purulent discharge.
6. That secondary ulcers on the female genitals do not infect the male by whom she was contaminated, so long as he is poisoned by the infection which gave it to her.
7. That as syphilis is communicable from a child to its nurse, and *vice versa*, great care ought to be taken that an infected child be not given to a sound nurse, nor a pocky nurse be hired for a sound child.
8. That syphilis in infants is only curable by mercury, which is best given directly to the child, as also to its nurse.
9. That there is no disease of the uterus, save the Hunterian chancre, which is pathognomonic of syphilis.
10. That the order of the abortions and premature labors is a very good test of their cause.
11. That ulceration may exist to a great amount on the os and cervix uteri, and not be discoverable by the toucher.
12. That the patulous state of the os uteri, induced by inflammation, may be present during pregnancy.
13. That children dying in the uterus from syphilis, like those dying from other causes, are thrown off within a fortnight or so after the cessation of vitality.
14. That there is a class of abortions and premature confinements preventible by iodide of potassium and similar medicines.—*Dublin Quar. Jour. of Med. Science.*

Stomachic Bitters, Tonics, and Aperients.—

Quinine strengthens digestion, especially when the stomach has been injured by drinking, or in persons exhausted by overwork. It does harm in organic disease, with a furred tongue, and when the urine throws down lithic acid, or lithate of ammonia. Give quinine half an hour or an hour before meals.

Columba.—This is a sedative as well as a tonic.

Gentian and Chiretta stimulate the liver, as well as act as tonics on the stomach; whereas, quinine and quassia sometimes check the secretions of the liver, and are therefore not adapted to cases where tne secretion of bile is defective.

Iron.—The citrate, or ammonia-citrate, mixed with a little bicarbonate of soda or potash, have the same effect as Griffith's mixture. Iron medicines may be given at meal-times.

Castor-Oil acts very mildly on the large intestines, and is therefore useful in convalescence from typhoid fever, in dysentery, and whenever we wish not to act too much on the large intestines.

Senna acts chiefly on the small intestines, and increases the secretion from the mucous membrane, and also that of the liver. It is, therefore, one of the best aperients in bilious affections.

Aloes and Colocynth act chiefly on the large bowels, and are, therefore, the best purgatives in disorders of the stomach.—*Dr. G. Budd.*

Removal of a Portion of the left Lung. By T. B. Hale, M. D.—C. D——, an Irishman, aged 25 years, rather small in stature, but stoutly built, with a well developed chest, being engaged in a fight while intoxicated, received a stab in the left side, parallel with the ribs. The wound was about one inch and a quarter long, and appeared to have been made with a sharp, clean-cutting instrument. About fourteen hours after the injury he was visited by Dr. Hale, who found, upon examination, a portion of the left lung protruding from the thorax. He was sitting up in bed, having the protruded portion supported by a broad bandage. He complained of no pain, and had suffered but little from loss of blood. There was no cough or difficulty of breathing, but on taking a full inspiration the protruded lung became filled with air, and drops of venous blood oozed from its substance. The protrusion was so tightly strangulated at the wound in the thorax that after an hour and a half spent in unsuccessful efforts to restore it, Dr. Hale made a cautious attempt to enlarge the wound in the interosseous space. Fearing, however, the effect of a large opening into the cavity of the pleura, he was induced to desist, and consider the propriety of excision. As the protrusion looked extremely unhealthy, from the length of time since the accident and the efforts made to reduce it, making gangrene not an improbable result, excision seemed to be the only resource. Dr. Hale contemplated applying a ligature at the base of the protruded lung, but on making two experimental incisions into its substance, and no blood flowing, this was not judged necessary, but the mass was at once excised, and the remaining portion pushed back through

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the wound in the interosseous space, the orifice of which was then closed with two stitches and strips of adhesive plaster. The patient was then directed to lie quietly on his back, and a mixture of two parts syr. prun. virgin., and one part syr. opii prescribed; a tablespoonful to be given every two hours for the purpose of allaying irritation in the bronchial tubes. On the second day Dr. Hale found him in a favorable condition, and on the sixth day he walked five miles to visit his physician, suffering in no manner from the loss of the portion of lung. For the last three months he has labored constantly in the coal mines, without inconvenience.

The speedy recovery of the patient appears to have been due to adhesive inflammation between the adjacent walls of the pleura, through the wound in which the protruded lung was strangulated. In all probability the pulmonary and costal pleura and the substance of the lung are all connected in the same cicatrix.

Medicinal use of Wine.—As a diuretic, Moselle may be as useful as gin or whiskey. In contains an excess of salts, and may prove as energetic as, and less heating than, the essential oil in gin or whiskey.

In diabetes, use the claret wines, which are free from sugar, and contain much tannic acid.

In dyspepsia and gout, use the wine most free from ultimate acidity and least stimulating. The best is the least acid claret wine; next, strong or perfectly dry champagne. Good Mansanilla will answer the purpose, and is much cheaper than Amontillado sherry. But, after all, weak brandy and water, or some pure spirits and water, is most free from acid and sugar, and answers best in dyspepsia.—*Dr. Bence Jones.*

Cholera.—Do not arrest the purging, it is eliminatory. Give turpentine and yeast as follows: yeast, a tablespoonful; oil of turpentine, a teaspoonful; cold water or barley water, two teaspoonfuls. Give this dose every second, third, or fourth hour, according to circumstances

Do not give opium. Give calomel freely, combined with camphor. Exhibit oxygen gas. This gas is easily given by shaking powdered chlorate of potash on a heated surface, and making the patient inhale the fumes. Or mix chlorate of potash with one-sixth its weight of black oxide of maganese, and throw the mixture on an iron shovel, heated to dull redness.—*Dr. Cormack.*

Lecture on Fever. By William Stokes, M. D.,— Let us now examine more closely some of the local or secondary deseases occurring in fever. In their seat, if not in their nature, these affections are observed to vary in different countries. On the continent—at least in France, and in a large portion of Germany—the frequency, and probably, the preponderance of the secondary disease of the intestines, is a matter that must be admitted. So remarkable indeed, is the predominance of the tumefaction and ulceration of the mucous glands of the intestine in France, that Andral, in the first edition of the *Clinique Médicale*, described fevers under the general head of diseases of the digestive system; and yet, Andral was no blind follower of Broussais. In Ireland, however, we do not find this remarkable preponderance of the secondary diseases of the digestive system; but, when I state this to you, I wish you to understand and adopt this principle, that all statements as to the anatomical characters of fever, as it prevails here or elsewhere, are to be accepted only so far as they apply to the prevailing epidemic. And, although it is true, that, on comparing our typhus with the French typhoid fever, this difference becomes apparent, that the existence of follicular disease of the intestine is almost the rule, and its absence the exception in the latter affection, while in the Irish typhus, this condition of the intestine is rare, you must, however, bear in mind, that in Ireland, and in our own time, we have had a great epidemic of what was certainly typhus fever, in which the condition of the intestine accurately represented that which is found to prevail on the continent. This is an important fact, and one which some of the continental writers on pathology do not seem to be aware of, or they would not be so apt to adopt artificial distinctions and erroneous opinions on the matter. In the epidemic of the years 1826, 1827, and part of 1828, disease of the mucous glands of the intestine was so frequent that its existence might be held to be the rule, and its absence the exception; and it is also true that intestinal ulcerations have been repeatedly observed in the maculated typhus of Ireland, their amount and frequency varying with the epidemic influence. Let me refer you, for proof of these statements, to Dr. Cheyne's papers in the first and second volumes of the *Dublin Hospital Reports*. Similar observations have been made elsewhere also. What, then, shall we say of that doctrine which declares that there is an essential distinction or difference marked by pathologico-anatomical characters between the continental fever and our typhus, or between the continued fever of Great Britain and fever as we have it in this country?—a difference to be expressed anatomically in this way, that in the continental or in the British continued fever there is extensive ulceration of the intestine, while in the fresh fever, this condition is wanting. Dr. Lombard, of Geneva, whose experience of fever in this country

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was manifestly insufficient to justify his coming to any decided opinion on the subject, holds that we have in Great Britain and Ireland two different fevers, one highly contagious, which he calls the Irish typhus, and in which the cephalic symptoms predominate to the exclusion of abdominal alterations; the other sporadic and most likely not so infectious, in which the abdominal symptoms are more predominant, so much so that the follicular disease and consequent ulceration are always present. These two fevers are in the opinion of this writer, to be found in most parts of Great Britain, but the first is most prevalent in Ireland, and in parts where the Irish come in great numbers; the other, similar to the European sporadic fever, is met with in all places, varies with the seasons, and is not necessarily produced by, or under the influence of, a contagious principle. Had Dr. Lombard been aware that ulcerations of the intestine are frequently met with in our petechial typhus; and again, that the typhoid, or at least a fever with extensive dothinenteritis, has raged epidemically for two years in this country, he would have been slow in venturing to settle the question in so decided a manner; and I have before mentioned to you, that during the prevalence of any particular epidemic in this country, we meet with cases agreeing in all their general characteristics, and having all the distinctive marks of typhus; in one set of which follicular ulceration is met with, while in another this lesion is entirely absent.

If, however, we inquire, what is the disease secondary to typhus, for the removal or modification of which we are most often called on to exert our skill in the wards of a Fever Hospital, and especially in the worst cases of petechial typhus, I would say that it is the pulmonary, rather than the gastro-intestinal complications. Certainly the secondary disease of the bronchial surface is generally the most formidable of the local affections in our Irish typhus. This is true, at least for cases which have occurred within the last ten or fifteen years. So great, indeed, is the frequency of this bronchial complication, that long before I was aware of the opinions of Rokitansky on this point, I frequently suggested in my lectures, whether the secondary bronchial disease might not be held to stand in the same relation to the Irish typhus that the follicular disease of the intestines in France bears to the fever in that country. Let me read to you a passage from Rokitansky's work, lately translated by Dr. Day for the Sydenham Society, bearing on the points before us. He is speaking of the typhus process on the mucous menbrane of the air passages:—"In primary broncho-typhus the general disease originally localises itself here, avoiding all other mucous membranes, even that of the intestine, for which in general the typhus process shows the most decided preference. The latter mucous membrane exhibits, however, in many cases a recognisable, though always subordinate and secondary develope-

ment of the follicles, in which the adjacent mesenteric glands pari cipate; and, in such cases, it is very often a difficult matter to distinguish the typhus in the above named affection of the bronchial mucous membrane. The peculiar stasis of the spleen, and of the great *cul de sac* of the stomach, the remarkable intumescence of the former, and the singular character of the blood, the typhus nature of the general disease, and especially the altered condition of the bronchial glands invariably serve, together with other symptoms, to indicate the typhus nature of the bronchial affection. The alteration occurring in the bronchial glands is of the same character as that affecting the mesenteric glands in abdominal typhus. They become swollen to the size of a pigeon's, or even of a hen's egg, are of a dark violet color, which afterwards becomes lighter, present a relaxed and friable appearance, and are infiltrated with a medullary typhus matter. Like typhus mesenteric glands, they may become the seat of a tumultuous metamorphosis, and thus either with or without perforation of the adjacent mediastinum, may give rise to pleurisy. This form is often combined with pneumo-typhus and typhus pleurisy, and is, beyond all doubt, the basis of the spotted contagious typhus, and very probably also of Irish and North American typhus, which, in the majority of cases, run their course without any intestinal affection. With us this affection is rare, and, in point of frequency, is not to be compared with abdominal typhus."

I may observe here, that by the term "tumultuous metamorphosis" is implied the occurrence of violent symptoms with suddenness and rapidity of progress. Dr. Day remarks that Rokitansky has used the term in a new sense, but it means generally, as I understand it, that a violent and reäctive inflammation occurs in the parts altered by the typhus process, which may cause great congestion, turgescence, perforation, or even gangrene. As Rokitansky does not indicate any distinctive features between the spotted contagious typhus and the Irish and North American typhus, we may safely hold them to be the same diseases.

With respect to the question of the comparative frequency and importance of the pulmonary as contrasted with the nervous symptoms in fever, as it effects the lower and upper classes in this country, my decided impression is, that taking the experience of the last twenty-five years, the secondary bronchial, or, to speak more generally, the pulmonary complications are much more frequent and dangerous in hospital than in private practice. It is not easy to explain why this should be so, but certainly we find a greater preponderance of nervous symptoms in the typhus fever, as it effects the upper classes of society, than in cases of the disease as we meet with it in hospital; while in hospital practice the nervous symptoms, though we cannot say that they are absent, seldom require any very special interference on the part of the prac-

titioner. No doubt we meet with coma and subsultus tendinum occasionally, but that predominance of nervous symptoms in the early periods of typhus, which is so common in the upper classes of society, is but rarely seen in our wards; and if you will only reflect on the simple fact, that we so rarely have occasion to shave the head among our hospital patients, you will fully see the truth of what we say. Remember, too, how many cases we have had, in which, while all the symptoms of typhus—such as prostration, weakness of the heart, eruptions of maculæ and petechiæ, and well marked secondary diseases of the mucous membrane of the intestines—were present while the patients minds remained quite unclouded, and while no symptom occurred calling for any special measures directed to the heads. The typhus of Ireland, then, is not characterized, as Dr. Lombard has described it, by a preponderance of cephalic symptoms, at least when it occurs in that class from which he supposes the best specimens of the disease to be drawn. He is as incorrect in his statements about the predominance of cephalic symptoms as when he says that the absence of follicular ulcerations of the intestines is a distinctive mark of Irish typhus.

In the typhus fever of the upper classes in this country the nervous symptoms are generally much more aggravated and developed at an earlier period; and it may be that this preponderance of the nervous symptoms, this tendency to affections of the brain in one class, even though these affections be principally neurotic, is a cause of the comparative exemption of such cases from the secondary bronchial disease. You will find as you advance in the study of general pathology, plenty of examples in which diseases of structure or of deposition are suspended or replaced by purely nervous affections. Explain it as we will, the general proposition appears true, that the nervous symptoms, comparatively speaking, are but slightly developed in the fever of the lower classes, while those indicative of nervous disease are much more prominent; and conversely that in the upper ranks symptoms indicative of irritation of the mucous surfaces are less developed, while the nervous symptoms are severe; and this, perhaps, may throw some light upon the doctrine which has been long held by many, that the mortality of fever is greater in proportion as we ascend in the scale of society.

I have already told you that, as regards prognosis, the preponderance of the nervous symptoms in fever should cause us more apprehension than that of any other class of symptoms, and especially when this preponderance is observed at an early period of the disease. This greater susceptibility of the nervous system in the higher classes may itself be a cause why we cannot use wine with as great liberality in this class as with ordinary hospital patients. And this, again, may explain the greater fatality in

private practice, inasmuch as that, in consequence of the excitement of the nervous system, and the incapability of the patients to bear stimulants largely, we are debarred from the use of that which is the great medicine for fever.

I think we may lay it down as a principle, that the more the secondary affections of fever are anatomical, the greater will be the utility of stimulants; and conversely the more they are neurotic, and especially in cases where these neurotic symptoms are more closely related to the cerebro-spinal centres, the less will be the efficacy of wine. It might be supposed, from *à priori* considerations, that the man in the higher classes of life who has been accustomed to the use of wine, would require it more and derive greater benefit from it in the course of a fever which it must be remembered is a disease of debility and prostration, than the peasant who has not been habituated to the regular use of stimuli; but I believe that the very reverse is the fact, and that the greatest triumphs of the stimulant treatment in fever are to be found when it affects the agricultural peasant whose nervous system has not been excited either by the use of stimulants or by intellectual exertion. I know that some will object to this on the ground that our Irish peasantry are habitually intemperate; but this charge of intemperance is only one of the many calumnies that have been put forth with reference to our countrymen.

The Irish peasant is not habitually intemperate; neither do his means permit nor his inclinations direct him to be so. When he does indulge, it is on special occasions; but you seldom meet in hospital a case of injury to the general health produced by a long course of intemperance in the agricultural peasant. The case is no doubt different in the class of artisans who are the inhabitants of our large cities and towns. In this class we find, that when fever attacks an individual we can neither use stimulants with the same boldness, nor reckon on their success with the same confidence as in the more sober portions of the population. In this respect the Irish are not peculiar.

To a person who is not in the habit of examining patients very closely, the frequency and importance of the bronchial disease would not appear very evident or striking as he walked round the wards of an Irish Fever Hospital. We find the patient lying in bed; he is, perhaps, in a state of stupor, but from this he is easily roused. He is covered with petechial spots, red or livid, as the case may be. There is nothing remarkable about his breathing; he is not reported to have any cough; his pulse is probably 120, or between 120 and 130, and his heart is weak. That patient, with but little hurry of breathing, not complaining of any distress, and without cough, may be, and frequently is, at that very time, almost in a very advanced stage of the bronchial disease. When you apply the stethoscope, you are surprised at the great amount

of disease that it reveals, although the symptoms of this important affection are absent. One would expect, that in such a case there would at all events be lividity of the countenance from the non-arterialization of the blood; but here is one of the curious things connected with fever which it is extremely difficult to explain; that you will often see but little lividity in such cases. At all events, it is not sufficient to draw the attention of the uninformed practitioner to the condition of the patient's lung. In most patients laboring under bad typhus there is a peculiar dusky hue of the face; and this he would have whether the bronchial disease were present or not. But I have over and over again seen the most extensive bronchial disease, where every tube seemed to be half-filled, and yet little of the skin of lividity which we see in a case of asthma or if bad suffocative catarrh existed. Consider this fact for a moment, for it is full of matter for reflection. What does it tell you? It announces to you this highly important principle, that in their formation, and in their progress, the secondary diseases of fever are, as it were, silent. They occur without the usual symptoms which are observed in idiopathic inflammations. They are not idiopathic inflammations, and, therefore, they have not the symptoms of them. Let us omit no opportunity of impressing this on our minds, that these diseases are not inflammations. They form silently—they advance silently. Consider for a moment the formation of a pustule in an ordinary case of small-pox. The pustule gives no notice of its formation. You turn down the clothes, and you find the arm covered with vesicles; the patient has not complained, but you find there is the disease. So it is with respect to the bronchial disease in typhus; so it is with respect to the intestinal disease in typhus. We see the bronchial disease forming in this singular and latent manner, without excitement or suffering of the patient. We see the same in the intestine; we see the same in the heart. The softening of the heart, as you will have abundant opportunities of seeing this season, is, in its commencement and all through, a silent process. The process of change up to its maximum alteration, and the process of retrocession up to the period of recovery, considered simply, when they are not interfered with by accidental irritative inflammation, go on silently. The disease may proceed to its maximum without symptoms, and retrocede without symptoms. Now, under these circumstances, I have told you, that when you apply the stethoscope, you find singularly extensive râles. These râles may be sonorous, mucous, or crepitating; the amount of each of these characteristics varying in every case, and in different portions of the lung, in the same individual. When you use percussion, you find that there is no remarkable dullness anywhere. I have not observed, at least in the bronchial affections of typhus fever, the curious result of percussion which we see in other cases of bronchial

disease. We have not observed any increase of sonoriety of the chest. This is a very remarkable fact. In a large number of cases of acute inflammatory bronchitis, you observe, that, so far from the chest being dull, it is actually clearer than natural; and this is explained by the circumstance, that there is a great accumulation of air in the air-cells of the lung,—that, in fact, every little air-cell of the lung is in a condition of extreme distension; it is full of air, and this air cannot find a ready egress during expiration, in consequence of the state of the bronchial tubes; and hence we have the increase of sonoriety. I have not observed this in cases of typhus fever where there was no consolidation of the lung; but, at the same time, it is to be noted, that we have not specially studied this point in fever cases. When the patient draws a deep breath, we frequently find that the râles go on increasing up to the very end of the inspiratory act; and in certain cases, the following curious circumstance is found, and it is one of those which illustrate what I have termed the silent action of the disease—that on applying the stethoscope you will find perhaps but little râle, or a loose rattle in the larger tubes, or perhaps in some of the secondary bronchial tubes,—that is during ordinary breathing. If you contented yourself with such an examination, you might come to the conclusion that there was very little the matter with the patient's lung—slight mucous disease in the lower part of the trachea, or in the very large tubes. But you may be altogether wrong; for, under these circumstances, it frequently happens, that when the patient draws a deep breath, you are startled with the extent and intensity of the râle running to the very end of the respiratory act. It is in this condition that the patient's life is seriously endangered; for if this bronchial disease does not retrocede, but continues to advance, it may happen that the patient will suddenly fall into a condition of asphyxia, tracheal rattle comes on, and he dies a mechanical death—in fact, he dies suffocated. You may leave your patient apparently going on very well, and be summoned to him in the course of a few hours, and find him *in articulo mortis*. This is a common thing, as I mentioned to you before, in patients in whom the bronchial disease has been overlooked or neglected.—*Virginia Medical and Surgical Journal.*

Of the Advantages of Local Stimuli, and particularly Nitrate of Silver, in Ophthalmia. By Mr. Critchett.—Mr. Critchett entertains the highest opinion of the benefits arising from this kind of treatment in catarrhal and purulent ophthalmia.

Of *catarrhal ophthalmia* he says: "If this affection be correctly diagnosed and attacked early, it may be cured rapidly and almost

invariably by local stimuli; and of these, by far the best, according to my experience, is a weak solution of the nitrate of silver, in strength about two grains to the ounce, of distilled water, gradually increased to six grains. If applied in the early stage, however severe and well-marked the disease may be, it will generally subside in a few days. The time required for cure being, according to my observation, pretty accurately measured by the interval between the first development of the disease, and the commencement of the remedy. As, for example, if the treatment be commenced on the third day, it will be well by the sixth day, and so on. I know of nothing that more thoroughly deserves the name of a specific than this. It should be carefully dropped in the eye with a camel's-hair brush or a quill, and may be repeated every three or four hours in severe cases. It causes slight smarting at first, which rapidly subsides, and then the patient feels great relief. The more completely the case is adapted for this treatment, the less pain does it occasion, and the more speedily does it pass off. It is in the epidemic form that the beneficial effect is the most rapid and clearly marked. If there be any unusual complication, as one or more pustules or aphtha, or if there be much constitutional disturbance, the effect is less decided and satisfactory, and it even sometimes fails, and must be discontinued, some astringent, as a solution of alum, being substituted. Some recommend that the caustic should be applied in a much less diluted form. Thus, Mr. Guthrie is, I believe, in the habit of using a strong ointment, containing ten grains of the nitrate of silver to a drachm of lard. As I usually succeed with the milder solution, I cannot speak from personal experience respecting this ointment, but I have no doubt it answers perfectly well, the important point being rather, the suitability of the case than the strength of the stimulus.

"I feel that the profession is much indebted to Mr. Guthrie for bringing prominently before them the value of nitrate of silver in eye disease; at the same time it is to be regretted that this distinguished surgeon, whilst probably instinctively selecting the suitable forms for its application in his own practice, has not very clearly defined the cases to which it should be limited. For we must ever remember that, like other powerful agents, it is equally efficient for good or for evil; whilst it is a remedy of sovereign value in suitable cases, it is most injurious when misapplied, and I have frequently known it to set up a specific inflammation, a sort of nitrate of silver disease, that is most intractable and distressing. The rule I lay down is this, *that in genuine catarrhal disease, it is a specific, and that it is useful in all cases in which the discharge from the conjunctival membrane is of a muco-purulent or purulent character, provided the disease is limited to that membrane, and has not extended to the cornea*

or other tissues of the eye. I find that relief ought very speedily to follow the application, and that the pain is slight; if therefore this be not the case, if the symptoms are decidedly aggravated, and the pain increased after a few applications, it is better not to persevere. The case has probably been mistaken, and is unsuited, or some complication has been overlooked; and we must always remember that in using this remedy, if we are not doing good we are doing harm.

"I have dwelt thus minutely, and at some length, upon this plan of treatment, because I believe that there exists in the minds of most medical men, and also in the pages of most ophthalmic works, very vague ideas respecting the use of the nitrate of silver in diseases of the eye, both as regards its value and the cases to which it is applicable. One of the most practical works we have on eye disease—viz., that by the late Mr. Tyrrell,—condemns the use of the nitrate of silver, *in toto;* others seem almost equally indiscriminate in its commendation; it is therefore not to be wondered at that those who have not extensive opportunities of bringing these diverse and contradictory views to the test of experience should acquire confused and erroneous opinions on this truly important practical point.

"In advocating the use of a solution of the nitrate of silver in catarrhal ophthalmia, I do dot wish to limit the treatment to this particular remedy; I am merely desirous of setting forth the stimulating plan as contrasted with the anti-phlogistic, which is strongly advocated by some high authorities, and which I feel satisfied will not control these specific inflammations, of mucous membranes. Other stimuli, particularly alum and the sulphate of copper in substance, may be employed with advantange; but I think, as a general rule, the nitrate of silver is the best; in fact, I have found it too uniformly successful, where the cases have been properly selected, to allow me to doubt its specific power over the disease. The only treatment I adopt in addition to this is, to smear the eyelids at night with spermaceti ointment, to prevent agglutination in the morning. No medicine of any kind is usually required, and the ordinary diet may be continued throughout the treatment of the case."

Mr. Critchett speaks in the same way of purulent ophthalmia:—

"The treatment of these cases is merely local; it is very simple, and the result highly satisfactory. All that is required is the frequent application of some mild astringent or caustic lotion to the surface of the conjunctiva. At the Ophthalmic Hospital we use a solution of alum, from five to ten grains to the ounce; but a weak solution of nitrate of silver answers equally well, and I think acts more rapidly. The essential point is, that whatever is used is well applied to the surface of the membrane. A frequent source of failure is to be traced to the neglect of this measure.

The remedy has been judiciously chosen, but has failed for want of being properly applied. If a lotion is used, it should be frequently injected with a syringe between the lids, so as to wash away the discharge, and get well over the surface of the membrane; if drops are used, the eye should be first carefully cleansed. This plan of treatment, when properly carried out, is almost uniformly successful. Out of many hundred cases that I have seen, I can scarcely recall a single instance where sight has been lost, if the treatment has been commenced sufficiently early in the disease.

"Often as this plan of treatment has been urged, and unanimously as it has been agreed upon by ophthalmic surgeons, simple as it is in its application, and certain in its results, yet painful experience proves that it constantly requires to be reiterated with increased emphasis. It is not unfrequently our painful duty to witness cases of this kind where sight is damaged and even destroyed for lack of a little practical knowledge of this subject on the part of some of my professional brethren If the despairing aspect and piteous cry of but one poor mother upon whose mind the sad truth suddenly breaks in that her child is hopelessly blind, could image itself to the sight and echo in the ears of those members of our profession, it surely would arouse attention to the importance of devoting a few thoughtful hours and some anxious care to this disease. So strongly have I been impressed upon this subject when I have had a case brought to me hopelessly blind, and have found that it has been under inefficient medical treatment, that I have felt that if it were permitted me to whisper but one short sentence in the ear of every member of our profession that should contain the essence of the greatest good to humanity with which I am acquainted, the one I would select in preference to all others would be—"*Local stimuli should be applied early, often, and thoroughly to the conjunctival surface in purulent ophthalmia of infants.*"—*London Lancet.*

Venereal Affections.—

Bubo.—I is seldom necessary to open a bubo. Employ counter-irritation. Take a solution of nitrate of silver (one drachm to two drachms of water), with the addition of three drops of strong nitric acid. This is to be painted freely into the skin over the inflamed gland. It causes great pain and soreness, which is followed by rapid diminution of the gland. This treatment may be extended to other cases in which inflammatory deposits, whether purulent or fibrinous, require to be absorbed or diminished.

Syphilis.—Treat the infecting chancre, the true, firm, indurated sore, with mercury. The unindurated sore may be safely treated without mercury. In treating the former, in Paris, the

proto-iodide of mercury is used, but this does not answer so well in this country as mercurial frictions, blue pill, or the grey powder.

The *Phagedænic Chancre* is treated by Ricord, by first destroying the whole of the unhealthy surface with the red hot iron, previously placing the patient under the influence of chloroform. After the sloughs have separated, the surface is covered with strips of ammoniacum and mercurial plaster, and doses of tartrate of iron are given with great success, in the less obstinate cases. The most frequent variety of sore in London is the phagedmænic, with induration. In this, the actual cautery does no good; mercury must here be given, and the system supported by bark, wine, or steel.—*Braithwait's Retrospect.*

Sulphate of Bebeerine in Diarrhœa.—Mr. Mathews, of Manchester, strongly recommends in the *Lancet* the use of sulphate of bebeerine as a remedy for severe diarrhœa, in fact, he states that he has found it "a very near approach to a specific, and that with a very few doses, as a rule; indeed, in many instances, its effects are magical, for in the course of half an hour I have seen a patient restored from intolerable anguish to perfect ease." He generally first gives a pill, consisting of two grains of calomel and half a grain of opium, and if there is great pain, or the vomiting is urgent, orders a sinapism to the scrobiculus cordis, and then follows up with the following mixture:—

Sulphate of bebeerine, twelve grains; sulphuric acid and rectified ether, of each, twelve minims; cinnamon water, six ounces; mix. One ounce to be taken every four hours.—*Dublin Hospital Gazette.*

Anodyne Cement for rendering Teeth insensible to Pain.—Mr. J. P. Clark, of London, with the object of rendering diseased teeth insensible to pain, previous to the operation of stopping them permanently with metal, or filing away the carious parts, recommends the application of a paste, composed of Canada balsam and slaked lime, which is to be inserted into the hollow tooth like a pill. Mr. Clark states, that this preparation affords immediate relief in all but chronic cases of inflammation. He says:—

"If fresh pills be inserted as often as the old ones wear out, or are removed on the return of pain, in order, like an abscess, to allow the escape of matter or blood, and this practice be continued the teeth will become as insensible to touch as the soundest, and may then be permanently stopped, and otherwise treated in the usual way, without the infliction of pain."—*Dublin Hospital Gazette.*

Editorial Department.

DEATH OF DR. COLEMAN ROGERS.

Dr. Coleman Rogers, the oldest and one of the most eminent of the physicians of Louisville, died at his residence on the 17th inst. Dr. Yandell, in announcing the event to the medical class of the University of Louisville, made the following remarks on his life and character, which form as full a biographical sketch of the deceased as our time and limits will permit at present:

Gentlemen: Another patriarch of our profession, a cotemporary of Chapman, Drake, Caldwell, and Cooke, is gone. Dr. Coleman Rogers, the father of your beloved teacher, who, but for this melancholy event, would have been on this stand before you at this hour, the most aged and one of the most eminent of our physicians, departed this life a few hours ago. He had been long a practitioner of Louisville, and was known to almost every citizen as one who in the prime of life had stood in the foremost rank of his profession.

Dr. Rogers was a native of Virginia, but came with his father, at a very early age, to Kentucky, and was reared in the neighborhood of Lexington. He studied medicine with that accomplished physician and gentleman, Dr. Samuel Brown, and subsequently attended medical lectures in the University of Pennsylvania, at a time when the fame of Rush was at its zenith, when Wistar was in his prime, and Physick was without a rival in surgery in all our broad land. After attending two courses of lectures he was compelled to return home before taking his degree, in the spring of 1805, but graduated in that venerable institution several years later. During his first residence in Philadelphia he was a private pupil of Dr. Charles Caldwell, who was then industriously laying the foundation of that renown which afterwards became co-ex-

tensive with our country. Dr. Rogers first settled in Danville, where he was associated in practice with the distinguished surgeon, Dr. Ephraim McDowell. Removing after a few years to the neighborhood of Lexington, in one of the early attempts to organize the medical department of Transylvania University, he was elected Adjunct Professor of Anatomy and Surgery. This honor, however, he declined, probably deeming the enterprise of founding at that time a medical school in the western wilds of America premature. It was several years later before the medical department of that earliest of our literary institutions was put into successful operation. Dr. Rogers, in the mean time, had removed to Cincinnati, where he pursued his profession for a number of years, a portion of the time in partnership with Dr. Drake, who like himself, had been brought up in Kentucky. He participated with Dr. Drake in the infant enterprise of medical teaching in Cincinnati, and for a single season was connected with the Medical College of Ohio as professor of Surgery. But he was not satisfied with a residence out of the State where he had spent his early years. In 1823 he removed to Louisville, where he has since continued to reside until the summons came, this morning, calling him to his final rest.

When the Medical Institute of Louisville was chartered, in 1833, Dr. Rogers was elected by the Managers professor of surgery, but as the organization was not completed at that time he performed no public duties under the appointment. Four years later the Institute was reorganized, and during the progress of the movement he showed himself one of the warmest and most disinterested friends of the enterprise. The chair of surgery was again tendered to him, but he finally declined the honor, concluding, no doubt, that he had reached a period in life too advanced to enter successfully upon a new career. But he was nevertheless as zealous a promoter of the undertaking as if he had embarked everything in its fortunes, and watched the progress of the school during its infancy with almost a paternal solicitude.

Dr. Rogers, ever since I had the honor of knowing him, has been a student, and there can be no doubt that he formed those habits of study early in life. He kept pace with the progress of his profession in its accelerated march. No addition was made to

the store of its practical facts that he did not soon possess himself of it; no change occurred in its philosophy with which he was not soon acquainted. He was a constant, daily, interested reader on medical subjects. If a new book appeared, you were sure to find that Dr. ROGERS had read it and mastered its contents, for he was not a mere superficial reader to take up indiscriminately whatever was thrown out, but his mind was of that independent cast that weighed and analysed what he read. These habits of application to study, and this undivided devotion to his profession through a long life are worthy of all praise, and should awaken a spirit of emulation in those who are pursuing the same vocation. They rendered Dr. ROGERS a thorough physician early in life, and kept him prominent among the foremost in his profession to its close. His faculties took no rust for they were kept in active exercise. With declining powers of body, with the sense of sight impaired and the sense of hearing almost gone, he continued to toil on in the discharge of professional duties to the last, and only relinquished his habits of study with his life.

Dr. ROGERS was a man of strong mind and an iron will, warm and steady in his attachments, and inflexible in his purposes. The profession of our city mourns him to-day as a pioneer and patriarch, who, for nearly half a century, labored faithfully to maintain the interests and dignity of his calling. Dr. ROGERS was in the 74th year of his age.